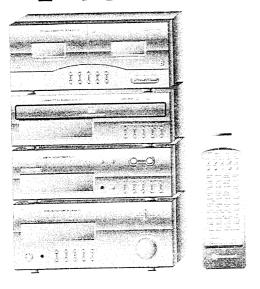
# SERVICEMANUAL

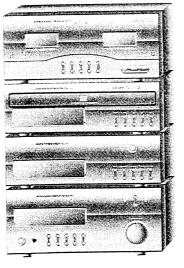
# AUDIO & VIDEO MINI COMPONENT SYSTEM

# P-757



- AV-757 STEREO INTEGRATED AMPLIFIER
- TX-757 FM/AM STEREO TUNER & TIMER
- CDC-757/ VCDC-757 MULTI COMPACT DISC PLAYER / VIDEO COMPACT DISC PLAYER
- DD-757 STEREO DOUBLE CASSETTE DECK

P-747





- AX-747 STEREO INTEGRATED AMPLIFIER
- TX-747
  FM/AM STEREO TUNER & TIMER
- CDC-757/ VCDC-757 MULTI COMPACT DISC PLAYER / VIDEO COMPACT DISC PLAYER
- DD-757
  STEREO DOUBLE CASSETTE DECK



# ■ CONTENTS ■

■ AV-/5//AX-747 ■	■ TX-757/TX-747 ■
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Exploded View	Exploded View
■ CDC-757/VCDC-757 ■	■ DD-757 ■
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# AV-757/AX-747

#### SAFETY PRECAUTION

#### WARNING

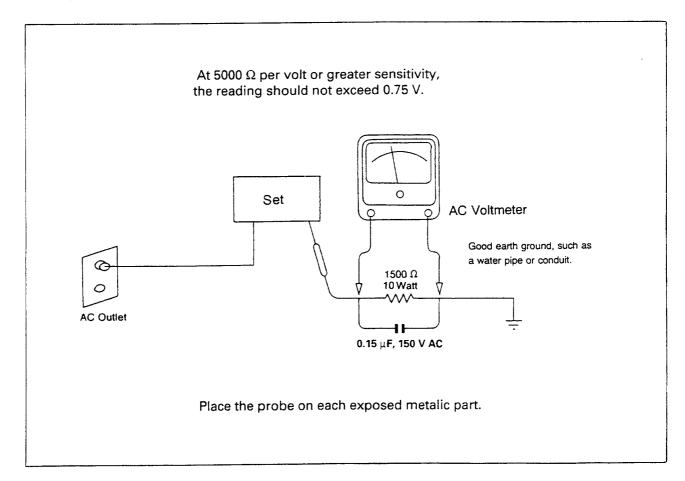
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements: electrical components having such features are identified by in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the

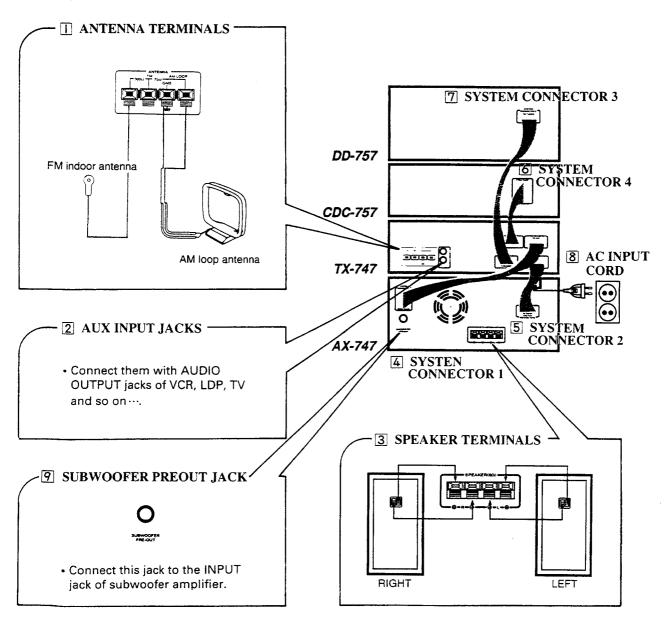
exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate danger of electrical shock. Plug the AC line cord directly into a 120 V AC outlet (120 V AC version only). (Do not use a line isolation transformer during this check.) Be sure your AC voltmeter has a sensitivity of 5000  $\Omega$  per volt or greater. Then connect a 1500  $\Omega$  10 watt resistor, paralleled by a 0.15 µF 150 V AC capacitor, between a known good earth ground (such as a water pipe, or conduit) and the exposed metalic parts, one at a time. Measure the AC voltage across the combination of a 1500  $\Omega$  resistor and a 0.15  $\mu$ F capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metalic part. Voltage measured must not exceed 0.75 V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



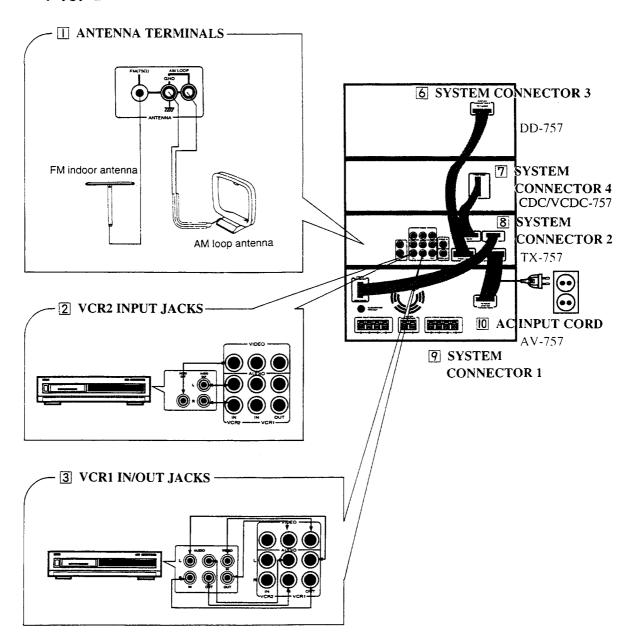
#### SYSTEM CONNECTIONS

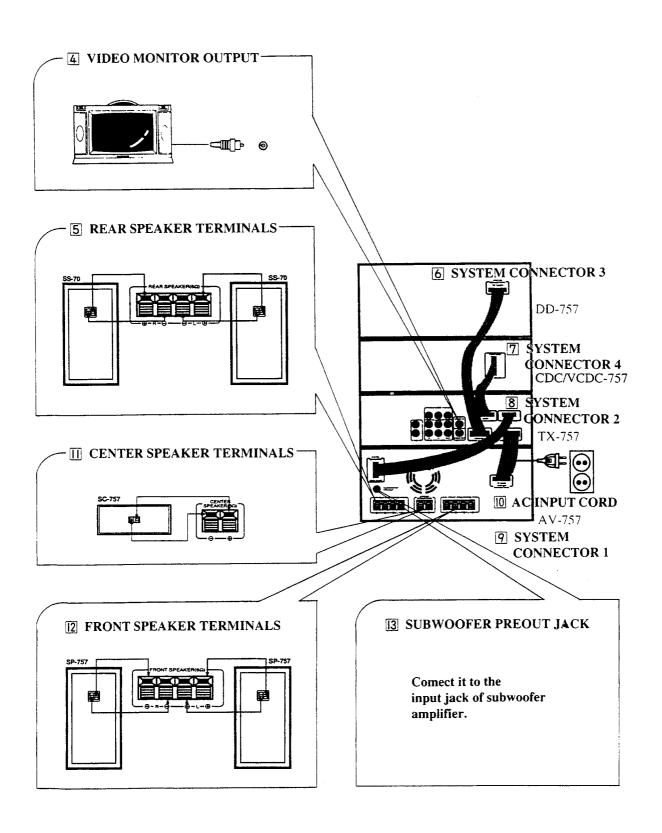
- Do not plug the AC input cord the AC outlet when plugging and unplugging connection cords.
- Make connections firmly and correctly according to the channel (Left and Right), polarity (+ and ) and connector(system 1 to 4). If not, it can cause loss of sound, noise or damage to unit.
- Be sure to use speakers of impedance 6  $\Omega$  .
- Place the AM loop antenna as far as possible from this system, TV, speaker cords and AC input cord and set it to a direction for the best reception.
- If the reception is poor with the AM loop antenna, an AM outdoor antenna can be used without the AM loop antenna.
- If the sound quality is poor with the FM indoor antenna, connect an FM outdoor antenna instead of the FM indoor antenna.
- If the electricity fails or the AC input cord is leaved unplugged for more then 15 days, the memorized contents are all cleared. So you should memorize them again.

#### ■ P-747 ■



#### ■ P-757 ■





#### **SPECIFICATIONS**

#### **FRONT SECTION**

Description	Unit	Nominal	Limit
RMS. output power			
<stereo mode=""></stereo>			
Input: VIDEO, THD < 0.5%, 6 ohms load	W	≥53	≥50
both channels driven at 1 kHz	·		
<surround av-757="" mode:="" only=""></surround>			
THD < 0.5%, 6 ohms load	W	≥33	≥30
single channels driven at 1 kHz			
Total Harmonic Distortion	%	≤0.2	≤0.2
Signal to Noise Ratio (IHF-A WTD), Input shorted	dB	≥85	≥80
Channel Separation with 4.7 kohms terminated.			
Input: VIDEO, 1 kHz	dB	≥50	≥50
Channel Unbalance, Input: VIDEO, 1 kHz	dB	≤1	≤2
Frequency Response at -3 dB	Hz	10∼60 k	20~40 k
X-Bass compensation at 80 Hz	dB	8±2	8±3
EQ Control (60, 150, 400, 1 k, 2.4 k, 6 k, 15 k) Hz	dB	10±2	10±3
Headphone Output at Rated PWR, 50 W			
Headphone Impedance: 68 ohms	mV	1200 ± 200	$1200 \pm 300$

**CENTER SECTION (AV-757 ONLY)** 

Description	Unit	Nominal	Limit
RMS. output power			
THD< 0.5%, 6 ohms, 1 kHz	W	≥33	≥30
Only center channel driven			
Signal to Noise Ratio (IHF-A WTD), Input shorted			
Input: 350 mV	dB	≥78	≥73
Frequency Response at -3 dB, Wide mode	Hz	20~18 k	50∼15 k

**REAR SECTION (AV-757 ONLY)** 

Description	Unit	Nominal	Limit
RMS output power			
THD < 0.7%, 12 ohms load	W	≥ 18	≥ 15
Only rear channel driven at 1 kHz			
Signal to Noise Ratio (IHF-A WTD), Input shorted			
Input: 350 mV, Delay time: 20 ms	dB	≥85	≥80
Frequency Response at -3 dB	Hz	80~7 k	100~6 k

#### General

Power consumption

Mode! Version	Α	D	PT INDO	KS
P-747		230 W	260 W	230 W
P-757	140 W	350 W	380 W	240 W

Dimensions (HxWxD)

AV-757/AX-747:  $274 \times 117 \times 280 \text{ mm} (10\text{-}3/4 \times 4\text{-}11/18 \times 11 \text{ inches})$  DD-757:  $274 \times 117 \times 280 \text{ mm} (10\text{-}3/4 \times 4\text{-}11/18 \times 11 \text{ inches})$  TX-757/TX-747:  $274 \times 87 \times 280 \text{ mm} (10\text{-}3/4 \times 3\text{-}3/7 \times 11 \text{ inches})$  CDC-757/VCDC-757:  $274 \times 87 \times 320 \text{ mm}$ 

 $(10-3/4 \times 3-3/7 \times 12-10/16 \text{ inches})$ 

Weight (Net)

(AV-757+DD-757+TX-757+CDC-757/VCDC-757): 14.7 kg (32.407 lbs) (AX-747+DD-757+TX-747+CDC-757/VCDC-757): 14.7 kg (32.407 lbs)

**Power Supplies** 

A: 120 V 60 Hz, USA & Canada version

D: 230 V 50 Hz, Europe version

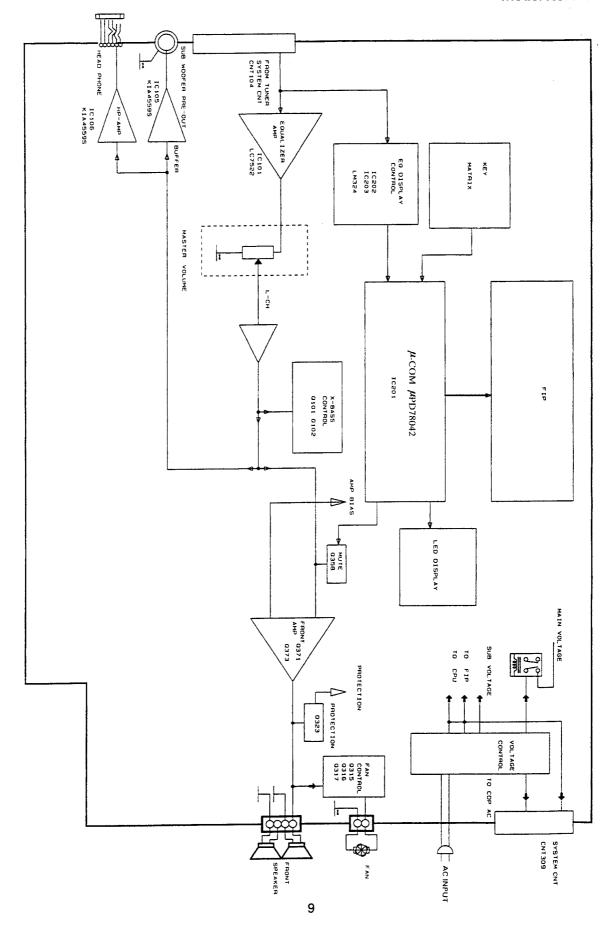
B: 110/220 V 50/60 Hz, Multi area version (PT INDO)

KS: 220 V 60 Hz, Korea version

**Note**: Nominal specs represent the design specs. All units should be able to approximate these. Some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition that still might be considered acceptable; in no case should a unit fail to meet limit specs. This manual is based on the EUROPE Standard wiring diagram, and information on regional component variations through use of parts list. Design and specifications are subject to change without notice for improvement.

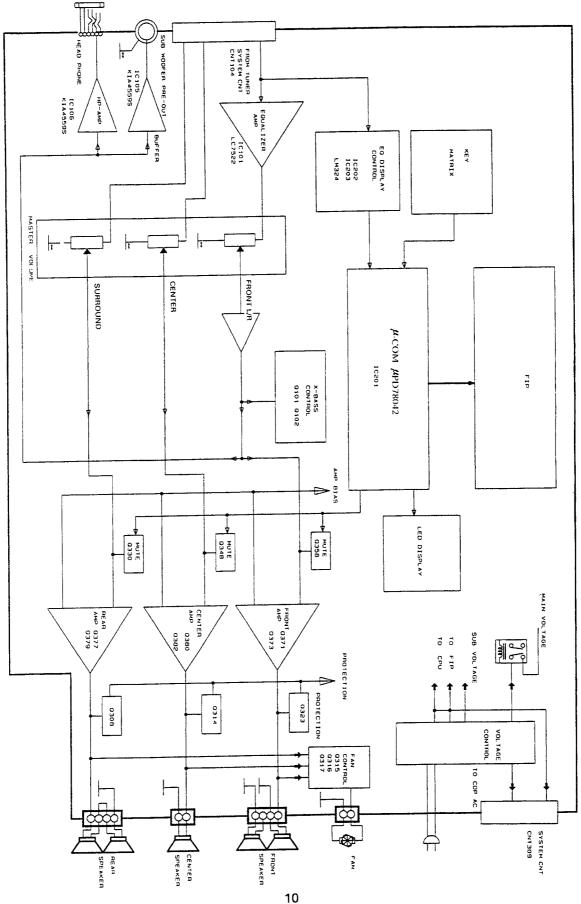
# **BLOCK DIAGRAM I**

Model No.: AX-747



## **BLOCK DIAGRAM II**

Model No.: AV-757



是在大型的企业,1918年中的企业,1918年中的企业,1918年中的基本的数据的企业的企业,1918年中的企业的企业的企业,1918年中的企业的企业的企业的基础的企业的

#### DISASSEMBLY PROCEDURES

#### REFER TO PAGES 17 AND 24.

- 1 COVER TOP REMOVAL
  Remove 6 screws a and then remove the
  Cover Top 2.
- 2 FRONT PANEL ASSEMBLY REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Remove the Card Cable from wafer (CNT303) on the Main P.C.Board (PCB3).
  - 3. Remove the Card Cable from wafer (CNT101) on the Volume P.C.Board (PCB4).
  - 4 Disconnect (CNT102) from the EQ P.C.Board (PCB1).
  - 5. Remove 7 screws **b** and then remove the Front Panel Assembly **AA**.
- 3 VOLUME P.C.BOARD (PCB4) REMOVAL.
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Remove the Front Panel Assembly AA, referring to the previous step 2.
  - 3. Disconnect (CNT501) from the Volume P.C. Board (PCB4).
  - 4. Pull out the Volume Knob with Volume LED P.C.Board (PCB6).
  - 5. Remove 2 screws (a) and then remove the Volume P.C.Board (PCB4).
- 4 FRONT P.C.BOARD (PCB2) REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Do steps 2 and 3.
  - 3. Remove 7 screws **()** and then remove the Front P.C.Board (PCB2) by pressing the hooks around it outward.
- 5 HEADPHONE P.C.BOARD (PCB5) REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Remove the Front Panel Assembly AA, referring to the previous step 2.
  - 3. Remove a screw (and then remove the Headphone P.C.Board (PCB5).
- 6 EQ P.C.BOARD (PCB1) REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Remove the Card Cable from wafer (CNT101) on the EQ P.C.Board (PCB1).

- 3. Disconnect (CNT102) from the EQ P.C.Board (PCB1).
- Remove a screw f and then remove the EQ P.C.Board (PCB1).
- 7 VOLTAGE SELECTOR P.C.BOARD (PCB7)
  REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Disconnect (CNT801 and CNT802) from the Voltage Selector P.C.Board (PCB7).
  - 3. Remove a screw **(g)** and then remove the Voltage Selector P.C.Board (PCB7).

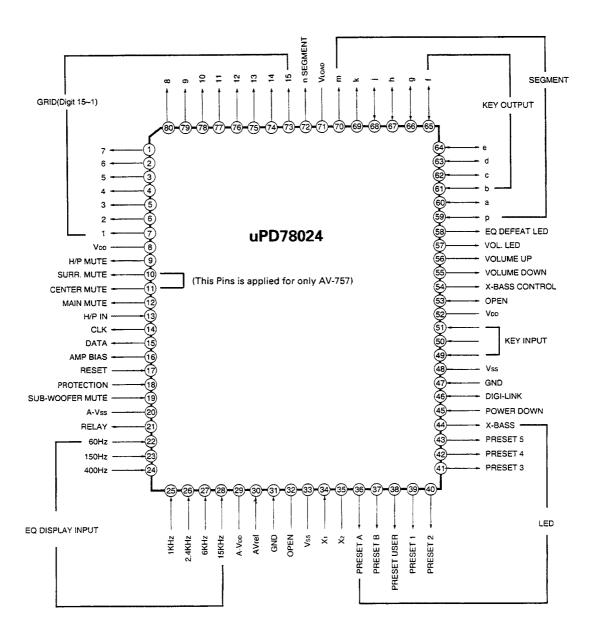
#### 8 CHASSIS BACK REMOVAL

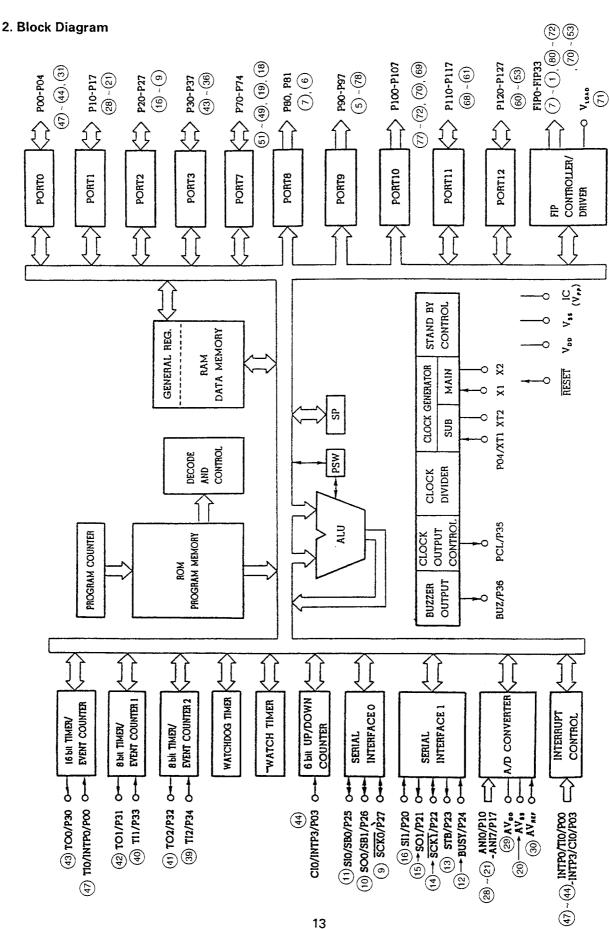
- 1. Remove the Cover Top 2, referring to the previous step 1.
- 2. Disconnect (CNT306 and CNT309) from the Main P.C.Board (PCB3).
- 3. Remove 12 screws (h) and then remove the Chassis Back (2) . (at AV-757)
  Remove 8 screws (h) and then remove the Chassis Back (2) . (at AX-747)
- 9 MAIN P.C.BOARD (PCB3) REMOVAL
  - 1. Remove the Cover Top 2, referring to the previous step 1.
  - 2. Do steps 6 and 8.
  - 3. Remove Card cable from wafer (CNT308) on the Main P.C.Board (PCB3).
  - Disconnect (CNT301 and CNT302) from the Main P.C.Board (PCB3).
  - 5. Remove 3 screws 1.
  - 6. Remove the Fastener 22 and then remove the Main P.C.Board (PCB3).

#### **CIRCUIT DESCRIPTION**

#### CPU(IC201): µPD78042

#### 1. Pin Description





# 3. Input and Output Terminal Functions

Pin No.	Symbol Symbol	Description
1~7	DIGIT 7~DIGIT 1	Output for grid.
8	Vdd	+5 V power supply.
9	H/P MUTE	Output for headphone mute.
	,,,,,	Output, high level under the following conditions.
		When power is turned on or off.
		When headphone plug is inserted.
		3. When "-∞ mute signal" is received from the commander.
		4. When function is changed.
	SURR. MUTE	Output for surround mute.
10	<av-757 only=""></av-757>	Output, low level under the following conditions.
	AV-757 ONL12	When power is turned off.
		When headphone plug is inserted.
		3. When "-∞ mute signal" is received from the commander.
		4. When function is changed.
		5. When surround mode is turned off.
	CENTER MUTE	Output for center mute.
11	· · · · · · · · · · · · · · · · · · ·	Output, low level under the following conditions.
	<av-757 only=""></av-757>	When power is turned off.
		When headphone plug is inserted.
		When "-∞ mute signal" is received from the commander.
		4. When function is changed.
		5. When center mode is turned off.
	A A A I A B SI LTT	Output for left and right chanels mute.
12	MAIN MUTE	Output, low level under the following conditions.
		1. When power is turned off.
		When headphone plug is inserted.
		When "-∞ mute signal" is received from the commander.
		4. When function is changed.
		Input for detecting headphone.
13	H/P IN	When headphone is plugged or unplugged, input is high or low level.
44/45	CLK/DATA	CLK/DATA output to LC7522.
14/15		Output for bias control.
16	AMP BIAS	When 3 seconds elapses after "power on", "H" and at "power off", "L".
ļ <u></u> -	RESET	Input to reset u-com.
17	PROTECTION	Input for protection.
18	PROTECTION	At "protection on", "L" and at "protection off", "H".
19	SUBWOOFER	Output for subwoofer preout mute.
19	MUTE	Output, low level under the following conditions.
ŧ	IVIOTE	1. When power is turned on or off.
		2. When function is changed.
		3. When "-∞ mute signal" is received from the commander.
		4. When headphone plug is inserted.
20	A-Vss	This pin provides the analog ground potential.
21	RELAY	Output for relay control.
41	INCLA!	At "power on", "H" and at "power off", "L".
22~28	EQ DISPLAY INPUT	Input for EO display
22~20	A-Vdd	LEV power cupply
30	A-Vref	Reference voltage.
31	GND	Ground

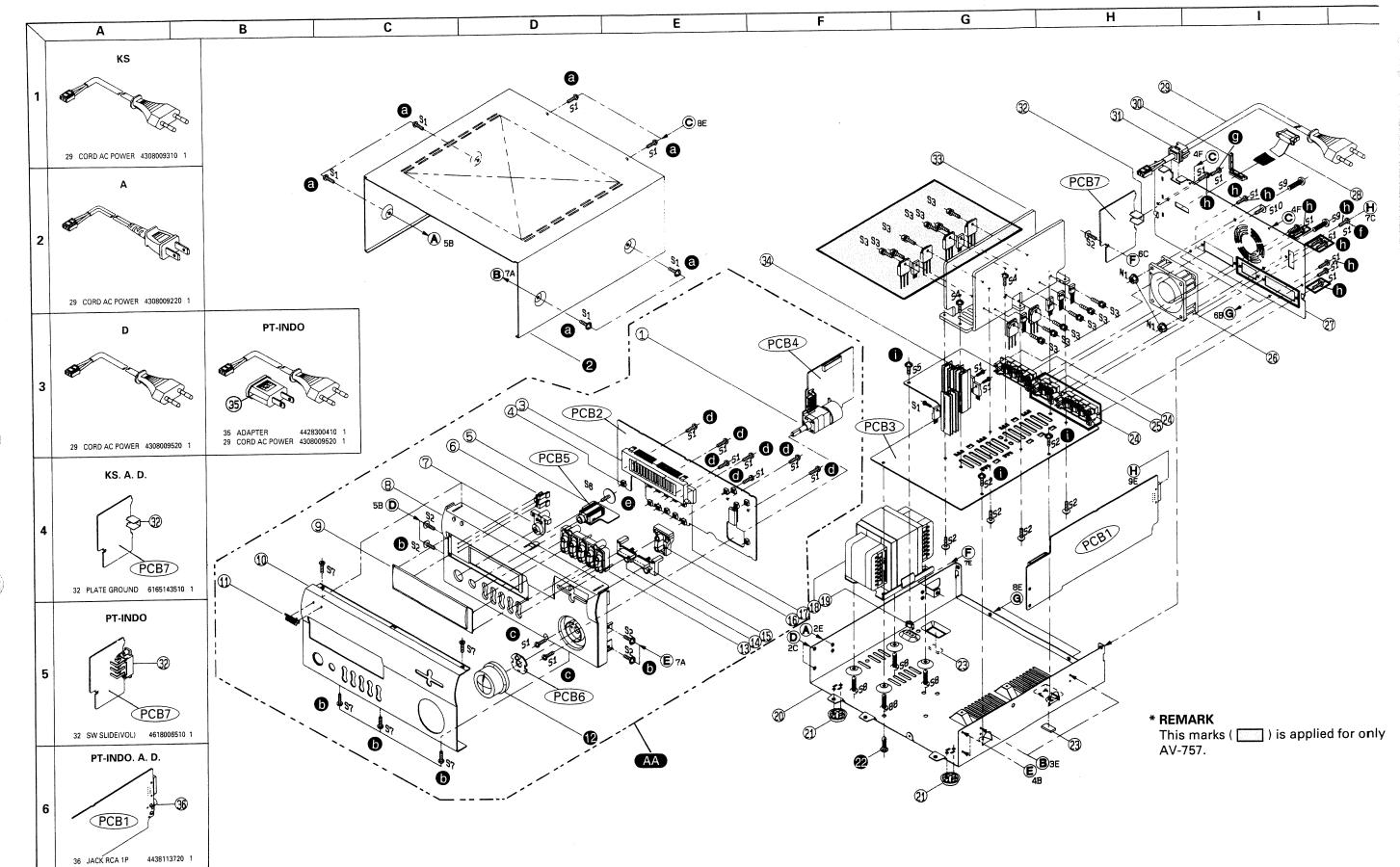
Pin No.	Symbol	Description
32	OPEN	Not used !
33	Vss	This pin provides the ground potential.
34/35	X1/X2	Input and output for crystal oscillator.
36~38	PRESET	Output to light up preset A, B or user LED.
	A,B USER LED	When selecting the desired mode, the corresponding output is "H".
39~43	PRESET	Output to light up preset 1, 2, 3, 4 or 5 LED.
	1,2,3,4,5 LED	When selecting the desired mode, the corresponding output is "H".
44	X-BASS LED	Output to light up X-BASS LED.
		At "x-bass on", "H" and at "x-bass off", "L".
45	P/D	Input for power down. (At "L", it is active)
46	DIGI-LINK	Input/Output for controlling digi-link.
47	GND	Ground
48	Vss	This pin provides the ground potential.
49~51	KEY INPUT	Input data for key scan.
52	Vdd	+5 V power supply.
53	OPEN	Not used !
54	X-BASS	Output for X-BASS control.
	CONTROL	At "x-bass on", "L" and "x-bass off", "H".
55/56	VOL. UP/DOWN	Output to control volume motor.
57	VOL. LED	Output to light up volume LED.
		At "power on", "H", and at "power off", "L".
58	EQ DEFEAT LED	Output to light up EQ defeat LED.
		At "EQ defeat on", "H" and at "EQ defeat off", "L"
59	SEG p	Output for segment.
60	SEG a	Output for segment.
61~65	SEG b~SEG f	Output, for segment, and data output for key scan.
66~70	SEG g~SEG m	Output for segment.
71	Vload	-30 V power supply of the FL controller.
72	SEG n	Output for segment.
73~80	DIGIT 15~DIGIT 8	Output for grid.

# **MECHANICAL PARTS LIST**

ef. No.	Description	Part No.	Q'ty	/ Version	Ref. No.		o. Q'ty Vers
	PACKAGE					MISCELLANEOUS	
	Box Carton (AV-757)	049605258201	1	KS		Card Cable, 21P, 220mm 41186212	25 1
	Box Carton (AX-747)	049605258202		KS		Card Cable, 21P, 120mm 41186211	29 1
	Box Carton (AV-757)	049605258206	1	A,D,PTINDO	PCB1	P.C.Board EQ 40050127	10 1
	Box Carton (AX-747)	049605258205	1	A,D,PTINDO	PCB2	P.C.Board Front 40050127	00 1
	Cushion Poly	9722041210	1		PCB3	P.C.Board Main 40010028	00 1
	Film Soft PE	9715000120	1		PCB4	P.C.Board Headphone 40010028	
					PCB5	P.C.Board Volume 40010028	
	CABINET & CHASSIS				PCB6	P.C.Board Volume LED 40010028	
	Volume, Motor	3228020010					
			1		PCB7	P.C.Board Voltage 40010028	10 1
	Cover, Top	046123017811	1				
	FIP, 15BW16Y	2328130931	1				
	Switch, Tact	4658003710	16				
	Jack, Phone	4438005510	1				
	Indicator, LED	8555051310	3				
	Button, Power	048545181011	1				
	Sody, Front	048521009711	1				
	Window, Display	048553023511	1				
	Panel, Front (AV-757)		1				
,		048602019811					
)	Panel, Front (AX-747)	048602019812	1			•	
	Badge, INKEL	048535045411	Ţ	KS			
)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO			
	Knob, Volume	048643007611	1				
	Button, Function	048543070011	1				
	Button, EQ, Left	048545131111	1				
	Button, EQ, Right	048545131121	1				
	Button, EQ, Up/Down	048543070111	1				
	Rubber Sponge	6715012010					
4	· ·			ve.			
	Power Transformer, 220 V, 60 Hz	2828100851	1	KS			
	Power Transformer, 230 V, 50 Hz	2828100931	1	D			
	Power Transformer, 110/220V, 50/60Hz	2828100921	1	PT INDO			
/ <i>/</i> 5	Power Transformer, 120 V, 60 Hz	2828100951	1	A			
	Spacer, PCB	6705004220	1				
	Chassis, Main	6121614910	1				
	Rubber Foot	6035104410	2				
	Fastener	6528301710	1				
	Cushion, Foot	6715021230					
	Terminal, Speaker, 4P (AV-757 ONLY)	4408105410					
	Terminal, Speaker, 2P (AV-757 ONLY)	4408107010					
	Fan, DC Brushless	5518103310					
	Chassis, Back (AV-757)	046102044511	1	KS			
	Chassis, Back (AX-747)	046102044411	1	KS			
	Chassis, Back (AV-757)	046102044521	1	Α			
	Chassis, Back (AX-747)	046102044421	1	A			
	Chassis, Back (AV-757)	046102044551	1	D			
	Chassis, Back (AX-747)	046102044451	1	D			
	Chassis, Back (AV-757)	046102044591	1	PT INDO			
	Chassis, Back (AX-747)	046102044491	1	PT INDO			
		4358615503		. ,			
.44	Connector, Lead Ass'y Cord, AC Power		1	ve			
	•	4308009310		KS			
	Cord, AC Power	4308009220	1	Α			
40	Cord, AC Power	4308009520		D,PT INDO			
	Stopper, Connector	6518002210					
	Stopper, Cord AC power	6518002310	1				
	Plate, Ground	6165143510	1	A.D.KS			
	Switch, Slide	4618006510	1	PT INDO			
	Heatsink, Power	7503067220	1				
	Heatsink, Regulator	7505206230					
	Adapter	4428300410	1	PT INDO			
	Not Used !		•	A,D,KS			
•	Jack RCA, 1P	AA38113700	1	A.D.RS A.D.PT INDO			
	Not Used!	4438113720	4				
	HOLOSEG!			KS			
	SARDWARE KIT						
	Screw, #B BTT 3x8B (AV-757)	8179130063	30				
	Screw, #B BTT 3x8B (AX-747)	8179130063			1	PRODUCT SAFETY NOTICE	
	Screw. #B WPTT 3x6Y	8179230061				THODOG SAFELT NUTICE	
	Screw, Heatsink AV-757)	8195000310			Engl	precaution in this manual should be sally and the	
	Screw, Heatsink (AX-747)				Con	precaution in this manual should be followed during	servicing.
		8195000310			Com	ponents identified with the IEC symbol 4 in the parts	list are of
	Screw, #2 WPTC 3x10Y	8159230101			spec	ial significance to safety. When replacing a co	mponent
	Screw, #2 WPTC 3x16Y	8159230161			iden	tified with 🕭 , use only the replacement parts design	gnated, or
	Screw, Mecha		1		parts	with the same ratings of resistance, wattage or vo	Itage that
	Screw, #2 FTC 3x8B	8129230083	5		are	designated in the parts list in this manual. Leakage-	current or
	Screw, BSAM 4x8B	8109440083	4		resis	tance measurements must be made to determine tha	t exposed
	Screw, BM 4x30B	8009140303	2		part	s are acceptably insulated from the supply circu	it before
	Screw, Ground	8155000710	2	D	retur	ning the product to the customer.	
	Not Used !		-	A,KS,PT INDO	L		
	Nut, HEX Flanged M4Y	8209540011	1				

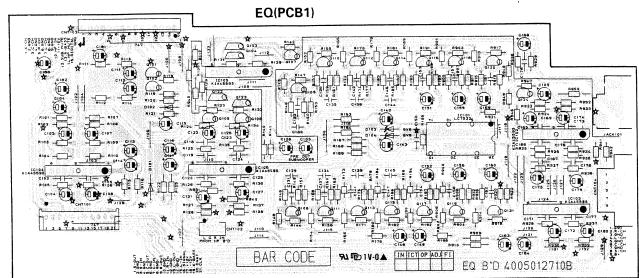
8209540011 1

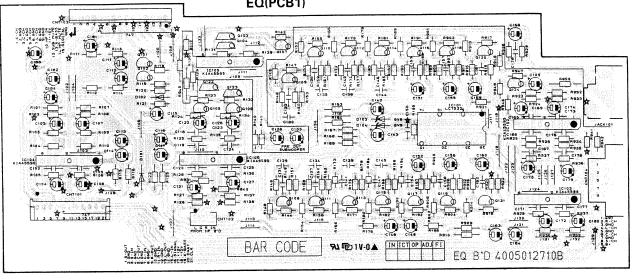
Nut, HEX Flanged M4Y

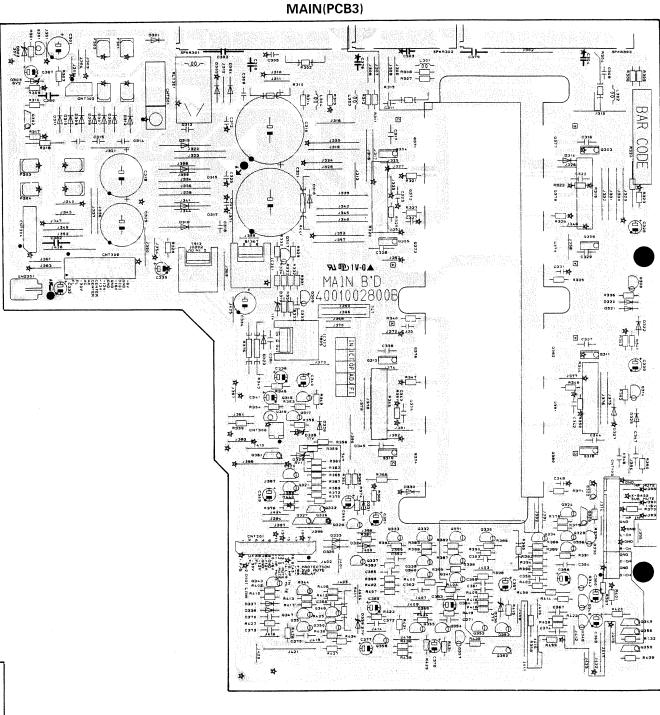


#### PRINTED CIRCUIT BOARDS

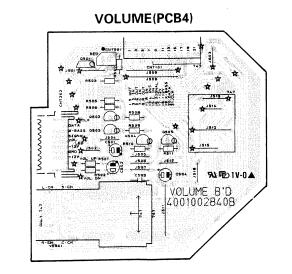


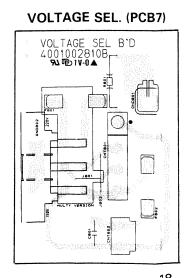




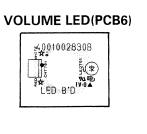


# FRONT(PCB2) DIP C/S









# **ELECTRICAL PARTS LIST**

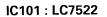
					1	. Call alama	t inting im	anortant to eafety			Ref. No.	Description		Part No. Q'ty	y Version	Ref. No.	Description	2.047		Part No. 3439247315	Q'ty Version
PRODUCT	SAFETY NOTIC	E : Produ	ucts r	narked v	with $ riangle$ have :	special chara	ecteristics in	nportant to safety.	otice in this manu	al	R165/R166	Carbon Film	15 kohm 1/5 W J	3069153970 2		C219	Electrolytic		uF 5.5 V uF 100 V J	3679332120	1
		If you	ı repl	ace any	of these com	ponents, rea	a carefully	the product safety n	Office in this mana	u.,	R167/R168	Metal Film	1 kohm 1/5 W J	3029102970 2		C220	Mylar Electrolytic SG		uF 50 V M	3479310071	1
		Don't	deg	rade the	safety of the	product thre	ough improf	Jei Seivichig.	10/1 7 · 180 - 20%	1	R169	Carbon Film	47 kohm 1/5 W J	3069473970 1		C221 C222/C223	Mylar	0.0022	uF 100 V J	3679222120	
		Resis	tor/C	apacitor	tolerance – L	$0: (\pm 0.5\%),$	J:(±5%), K	$(: (\pm 10\%), M: (\pm 20\%))$	7/07, 2 . +00, - 20/0	,	R170/R171	Metal Film	390 ohm 1/5 W J 1 kohm 1/5 W J	3029391970 2 3029102970 2		C224/C225	Electrolytic SG		uF 50 V M	3479310071	2
					Part No. C	ty Version	Ref. No.	Description		Part No. Q	'ty Version R172/R173	Metal Film Carbon Film	100 kohm 1/5 W J	3069104970 2		C226/C227	Electrolytic SG	0.22	uF 50 V M	3479322871	
	Description		PANA 1001.120	2014 10 E 10 E 10 E 10 E 10 E 10 E		enggersengi/areneen	IC105	KIA4559S/KIA75559S		2168206103	1 A,D,PT INDO R176	Metal Film	180 ohm 1/5 W J	3029181970 1		C228/C229	Ceramic Tubular	820	pF 50 V J	3519821935	
	ASSEMBLY P.C.B	OARD EQ				Carrie San No.	(IC105)	Not Used!			KS R177/R178	Carbon Film	820 kohm 1/5 W J	3069824970 2		C230	Electrolytic SG		uF 50 V M uF 50 V M	3479310071 3479347971	
	CAPACITORS	400	ρF	50 V M	3519101935	1	IC106	KIA4559S/KIA75559S		2168206103	1 R179/R180	Carbon Film	15 kohm 1/5 W J	3069153970 2		C231 C232	Electrolytic SG Electrolytic SG		uF 50 V M	3479347971	1
0.02	Ceramic Tubular Electrolytic SG			50 V M	3479347971						R181/R182	Metal Film	390 ohm 1/5 W J	3029391970 2 3029102970 2		C232	Liectrolytic GG	7.1	u, 55 t	•	and the second s
	Ceramic Tubular			50 V M	3519101935	1		TRANSISTORS		2208606104	R183/R184	Metal Film	1 kohm 1/5 W J 100 kohm 1/5 W J	3069104970 2			CONNECTORS				
	Electrolytic SG			50 V M	3479347971	3	Q101/Q102	KTC3198Y, NPN			2 R185/R186 1 A,D,FT INDO R187/R188	Carbon Film Carbon Film	820 kohm 1/5 W J	3069824970 2		CNT201	Wafer, FPC, 21P			4428526330	1
•	Electrolytic SG	0.33	uF	50 V M	3479333871	2	Q103	DTC114YS Not Used!		2200022100	KS R189/R190	Carbon Film	15 kohm 1/5 W J	3069153970 2		CNT202	Wafer, 10P			4428810996	1
C113/C114	Electrolytic SG	47		16 V M	3479347031	2	(Q103) Q104	DTA114YS/KRM107M		2238006103			390 ohm 1/5 W J	3029391970 2			210252				
C115	Electrolytic SG	22		25 V M	3479222041 3479347031	2	(Q104)	Not Used!			KS R193/R194	Metal Film	1 kohm 1/5 W J	3029102970 2		D004	DIODES Zener, UZ 5.1 BS	in P		2258599103	1
	Electrolytic SG	47 820		16 V M 50 V J	3519821935	1		KTC3198Y, NPN		2208606104		Carbon Film	27 kohm 1/5 W J	3069273970 1		D201 D202-D218				2058322101	50
C118	Ceramic Tubular Ceramic Tubular	100	1	50 V M	3519101935	1	Q107	KTD1302, NPN		2208606112	1(100/1(10)	Carbon Film	100 kohm 1/5 W J	3069104970 2		D202-D210	Zener, UZ 6.2BSI	•		2258599105	20
C119 C120	Ceramic Tubular	470		50 V J	3519471935	1	(Q107)	Not Used!		2208606104	KS R198	Metal Film	100 ohm 1/5 W J 820 kohm 1/5 W J	3029101970 1 3069824970 1		D220	Zener, UZ 7.5 BS			2258599130	1
C120	Electrolytic SG	47	•	16 V M	3479347031	1	Q108-Q121	KTC3198Y, NPN		2238006103	4 R199	Carbon Film Carbon Film	820 kohm 1/5 W J	3069824970 1		D221	1N4148, Switchin			2058322101	T()
C122	Electrolytic SG	4.7	uF	50 V M	3479347971	1	Q122	DTA114YS/KRM107M DTC114YS		2208622106	1 R900 1 R901/R902		15 kohm 1/5 W J	3069153970 2			B LED, SLR-34URO			2371124701	4.00
C123	Ceramic Tubular	820	h	50 V J	3519821935	1	Q123 Q124	KTC3198Y, NPN		2208606104	11001/11002	Metal Film	390 ohm 1/5 W J	3029391970 2			LED, SLR-34GCF			2371124301	554.5
C124	Ceramic Tubular	100		50 V M	3519101935 3519471935	1	Q 12-T	1110010011111111			R905/R906	Metal Film	1 kohm 1/5 W J	3029102970 2		LED209/210	LED, SLR-34URO	JF25, Red		2371124701	۷ م
C125	Ceramic Tubular	470	•	50 V J 50 V M	3479347971	1		RESISTORS			R907/R908	Carbon Film	100 kohm 1/5 W J	3069104970 2			INTEGRATED CI	IRCUITS			1
C126	Electrolytic SG	4.7 47	ur uF	16 V M	3479347031	1	R101	Carbon Film	6.2 kohm 1/5 W J	3069622970	1 (000)110.0		100 ohm 1/5 W J	3029101970 2		IC201	uPD78042	NOO!!O		2139313111	1 \$
C127	Electrolytic SG Electrolytic SG	47	uF	16 V M		1 A,D,PT INDO		Carbon Film	100 kohm 1/5 W J	3069104970	101111012		820 kohm 1/5 W J 15 kohm 1/5 W J	3069824970 2 3069153970 2		IC202/203	KA324			2168000113	2
C128 (C128)	Not Used!					KS	R103	Metal Film	270 ohm 1/5 W J 6.8 kohm 1/5 W J	3029271970 3069682970	1 (0 10/10/10/1		1 kohm 1/5 W J	3029102970 2							F.
C129/C130	Mylar	0.0033	uF	100 V J	3073002120	2	R104	Carbon Film Carbon Film	100 kohm 1/5 W J	3069104970	11010110	Metal Film	390 ohm 1/5 W J	3029391970 2			TRANSISTORS				10
C131/C132	Ceramic Tubular	330	pΕ	50 V J	33 1333 1333	2	R105/R106 R107	Carbon Film	6.2 kohm 1/5 W J	3069622970	1(01111010	Carbon Film	100 kohm 1/5 W J	3069104970 2		Q201-Q212	DTC114YS			2208622106	12
C133	Electrolytic SG	47	uF	16 V M	3479347031	1 A,D,PT INDO 1 KS	R108	Carbon Film	100 kohm 1/5 W J	3069104970		Carbon Film	820 kohm 1/5 W J	3069824970 2			RESISTORS				c- \$
(C133)	Not Used!	0.0000		100 V J	3679822120	2	R109		270 ohm 1/5 W J	3029271970	11020/1102	Carbon Film	100 kohm 1/5 W J	3069104970 2		R200	Metal Film	3.3	ohm 1/5 W J	3029339970	1
C134/C135	Mylar	0.0082 820	uF pF	50 V J	3519821935	2	R110	Carbon Film	6.8 kohm 1/5 W J	3069682970	11020	Metal Film	1 kohm 1/5 W J	3029102970 1		R201	Carbon Film		kohm 1/5 W J	3069223970	
C136/C137	Ceramic Tubular Mylar	0.02		100 V J	3679203120	2	R111/R112	Metal Film	1.5 kohm 1/5 W J	3029152970 3069473970	11320	Carbon Film	8.2 kohm 1/5 W J 220 kohm 1/5 W J	3069822970 1 3069224970 1		R202	Carbon Film	220 k	kohm 1/5 W J	3069224970	1
C138/C139 C140/C141	Mylar	0.0022		100 V J	3679222120	2	R113/R114	Carbon Film	47 kohm 1/5 W J 100 ohm 1/5 W J	3029101970		Carbon Film Carbon Film	8.2 kohm 1/5 W J	3069822970 1		R203	Metal Film		ohm 1/5 W J	3029271970	\$28000c
C140/C141	Electrolytic SG	47	uF	16 V M	3479347031	2	R115/R116	Metal Film Metal Film	4.7 kohm 1/5 W J	3029472970		Carbon Film	100 kohm 1/5 W J	3069104970 1	A,D,PT INDO	R204/R205	Carbon Film		kohm 1/5 W J	3069103970	
C144/C145	Mylar	0.0047		100 V J	3679472120	2	R117 (R117)	Not Used!	4.7 (01117 17011 0		KS (R929)	Not Used !			KS	R206	Metal Film		ohm 1/5 W J	3029339970 3069103970	
C146/C147	Mylar	0.047			3679473120 3479347031	2	R118/R119	Metal Film	3.3 kohm 1/5 W J	3029332970		Carbon Film	100 kohm 1/5 W J	3069104970 1		R208	Carbon Film Carbon Film		kohm 1/5 W J kohm 1/5 W J	3069104970	(
C148/C149		47	uF pF	16 V M 50 V M		1	R120	Metal Film	220 ohm 1/5 W J	3029221970	1 R931	Metal Film	1.5 kohm 1/5 W J	3029152970 1		R209/R210 R211/R212			kohm 1/5 W J	3069623970	4)
C150	Ceramic Tubular	100 0.1	υF		3479310871	2	R121	Carbon Film	470 kohm 1/5 W J	3069474970		Carbon Film	100 kohm 1/5 W J	3069104970 2 3029102970 1		R213	Metal Film		ohm 1/5 W J	3029101970	1
C151/C152	Electrolytic SG Mylar	0.015		100 V J	3679153120		R122/R123	Metal Film	10 ohm 1/5 W J	3029100970 3069822970		Metal Film	1 kohm 1/5 W J 8.2 kohm 1/5 W J	3069822970 1		R214	Carbon Film	15 k	kohm 1/5 W J	3069153970	
C153/C154 C155/C156		0.22	uF	50 V M	3479322871		R124	Carbon Film	8.2 kohm 1/5 W J 100 kohm 1/5 W J	3069104970		Carbon Film Carbon Film	220 kohm 1/5 W J	3069224970 1		R215/R216	Metal Film		kohm 1/5 W J	3029332970	2
C157/C158	Mylar	0.0047	uF	100 V J	3679472120		R125	Carbon Film Metal Film	3.9 kohm 1/5 W J	3029392970	,,,,,,,	Carbon Film	8.2 kohm 1/5 W J	3069822970 1		R217	Carbon Film		kohm 1/5 W J	3069153970	
C159/C160	Electrolytic SG	0.68	uF	50 V M			R126 R127	Carbon Film	100 kohm 1/5 W J	3069104970		Metal Film	1 kohm 1/5 W J	3029102970 1	A,D,PT INDO	R218	Metal Film		ohm 1/5 W J kohm 1/5 W J	3029101970 3069104970	
C161/C162	Mylar	0.1	uF	63 V K 16 V M	3679104297 3479347031	2	R128	Metal Film	4.7 ohm 1/5 W J	3029479970	1 (R938)	Not Used!			KS	R219 R220/R221	Carbon Film Carbon Film		kohm 1/5 W J	3069203970	
C163/C164	Electrolytic SG	47	uF pF		3519331935		R129-R131	Metal Film	1 kohm 1/5 W J	3029102970	3 A,D,PT INDO R939	Carbon Film	100 kohm 1/5 W J	3069104970 1		R220/1221	Metal Film		kohm 1/5 W J	3029332970	200
C165/C166		330 150	ρF		3519151935	1		I) Not Used !		0000000070	KS R940	Metal Film	1.5 kohm 1/5 W J			R223	Carbon Film	15 k	kohm 1/5 W J	3069153970	1
C167 C168	Ceramic Tubular Electrolytic SG	22			3479222041	1 A,D,PT INDO	R132/R133	Metal Film	3.3 kohm 1/5 W J			Metal Film	1 kohm 1/5 W J 4.7 kohm 1/5 W J			R224	Metal Film	100	ohm 1/5 W J	3029101970	1
(168)	Not Used !					KS	R134	Carbon Film	8.2 kohm 1/5 W J 100 kohm 1/5 W J	3069104970		Metal Film Metal Film	3.3 kohm 1/5 W J	3029332970 1		R225	Carbon Film		kohm 1/5 W J	3069623970	
C169	Electrolytic SG	1	uF				R135 R136	Carbon Film Metal Film	3.9 kg/hm 1/5 W J	3029392970		Carbon Film	15 kohm 1/5 W J	3069153970 1		R226	Metal Film		kohm 1/5 W J	3029332970	
C170	Electrolytic SG	2.2	uF				R137	Carbon Film	100 kohm 1/5 W J			Carbon Film	27 kohm 1/5 W J	3069273970 1		R227	Carbon Film		kohm 1/5 W J kohm 1/5 W J	3069623970 3069153970	3
C171	Ceramic Tubular	47	•				R138	Metal Film	4.7 ohm 1/5 W J			Metal Film	330 ohm 1/5 W J			R228 R229	Carbon Film Metal Film		ohm 1/5 W J	3029101970	
C172	Electrolytic SG	2.2		50 V M 50 V J			R139	Metal Film	1 kohm 1/5 W J	3029102970	1 A,D,FT INDO R950	Carbon Film	100 kohm 1/5 W J	3069104970 1		R230/R231	Carbon Film		kohm 1/5 W J	3069203970	
C173	Ceramic Tubular	330 1		50 V M			(R139)	Not Used!		0000404070	KS					R232/R233			kohm 1/5 W J	3069623970	
C174 C175	Electrolytic SG Ceramic Tubular	330		50 V J		1		Metal Film	100 ohm 1/5 W J	3029101970	2 A,D,PT INDO KS 36	MISCELLANEOU Jack RCA, 1P	JS	4438113720 1	A.D.PT INDO	R235	Metal Film	270	ohm 1/5 W J	3029271970	
C176	Ceramic Tubular	150		50 V J	3519151935		,	I) Not Used !	3,3 kohm 1/5 W J	3029332970	1 A,D,PT INDO (36)	Not Used !		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	KS	R236/R237	Carbon Film		kohm 1/5 W J	3069623970	
C177	Ceramic Tubular	47		50 V J			R142	Metal Film Not Used!	3.3 KOIIII 1/3 44 3	00200020.0	KS (30)	Not Ooca .				R238	Metal Film		ohm 1/5 W J	3029271970	
C178	Ceramic Tubular	100	рF	50 V M	3519101935	1 A,D,PT IND	o (R142) R143	Carbon Film	15 kohm 1/5 W J	3069153970	1					R239	Metal Film		ohm 1/5 W J	3029101970 3069623970	
(C178)	Not Used !		_	50 1/ 14	3479322971	KS 2	R144	Metal Film	390 ohm 1/5 W J	3029391970	1 PCB2	ASSEMBLY P.C.	BOARD FRONT			R240-R242 R243	Carbon Film Carbon Film		kohm 1/5 W J kohm 1/5 W J	3069153970	
C179/C180		2.2		50 V M			R145	Carbon Film	15 kohm 1/5 W J	3069153970	i i	CAPACITORS		0510171005 1		R244	Carbon Film		kohm 1/5 W J	3069623970	
C181-C184		4.7 0.047		50 V F			R146	Metal Film	1 kohm 1/5 W J	3029102970		Ceramic Tubular	•	3519471935 1 3679472120 2		R245	Metal Film		kohm 1/5 W J	3029332970	
C185-C187	Ceramic Tubular	0.047	ui	30 ( )			R147	Metal Film	390 ohm 1/5 W J	3029391970			0.0047 uF 100 V J 47 uF 16 V M			R246	Carbon Film	62 k	kohm 1/5 W J	3069623970	1
	CONNECTORS						R148	Metal Film	1 kohm 1/5 W J 100 kohm 1/5 W J	3029102970 3069104970		Electrolytic SG Ceramic Tubular				R247	Carbon Film	15 k	kohm 1/5 W J	3069153970	
CNT102	Wafer, 4P				4428516310		R149/R150		820 kohm 1/5 W J	3069824970		Mylar	0.033 uF 100 V J			R248	Metal Film		ohm 1/5 W J	3029101970	
CNT102	Wafer, 15P				4428561520		R151	Carbon Film Carbon Film	15 kohm 1/5 W J	3069153970		Electrolytic SG	1 uF 50 V M			R249/R250			kohm 1/5 W J	3069203970	
CNT104	Wafer, 9P				4428509820	1	R152 R153	Carbon Film	820 kohm 1/5 W J	3069824970			10 uF 50 V M	3479310071 2	2	R251	Carbon Film		kohm 1/5 W J	3069753970	
							R154	Carbon Film	15 kohm 1/5 W J	3069153970		Mylar	0.033 uF 100 V J			R252 R253	Metal Film		kohm 1/5 W J kohm 1/5 W J	3029332970 3069153970	
	DIODES				2058322101	2	R155/R156	=	390 ohm 1/5 W J	3029391970		Mylar	0.015 uF 100 V J	3679153120 2		R254/R255	Carbon Film Metal Film		ohm 1/5 W J	3029101970	
	1N4148, Switchi				2258599121		R157/R158	Metal Film	1 kohm 1/5 W J	3029102970		Mylar	0.1 uF 100 V J			R256	Carbon Film		kohm 1/5 W J	3069203970	
D103/D104	Zener, UZ 6.8 B	SC					R159/R160	Carbon Film	100 kohm 1/5 W J				0.0056 uF 100 V J 10 uF 50 V M	3679562120 2 3479310071 1		R257	Carbon Film		kohm 1/5 W J	3069684970	
	INTEGRATED C	IRCUITS					R161/R162		820 kohm 1/5 W J 390 ohm 1/5 W J	3069824970 3029391970		Electrolytic SG	IO UF SUVIVI	0-7,00,0071 1							
IC101	LC7522				2168017122		R163	Metal Film Metal Film	470 ohm 1/5 W J												
	4 KIA4559S/KIA75	5559S			2168206103	3	R164	Wictarrinii	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		19										

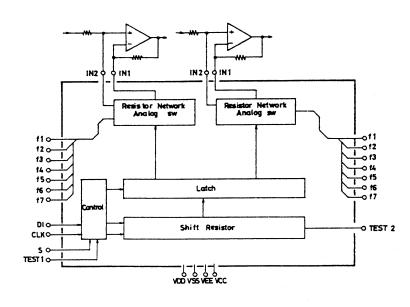
ef. No.	Description	Part No. Q'ty Version		Part No. Q'ty V		Description	Part No. Q'ty Ve		Description		Part No. Q'ty Vers
259	Metal Film 3.3 kohm 1/5 W J		(C356/C357) Not Used ! (AX-747)		Q302	DTC114YS	2208622106 1	Q380	2SD718/KTD718, NPN		2028407109 1
260	Carbon Film 20 kohm 1/5 W J	3069203970 1	normal recommendation of the State of the St	50 V M 3519102935 1	Q303	KSC2690, NPN	2008602102 1	Q381	2SC4137, Bias		2008622110 1
262-R266	Metal Film 270 ohm 1/5 W J	3029271970 5	(C358) Not Used ! (AX-747)		(Q303)	Not Used! (AX-747)		Q382	2SB688/KTB688, PNP		2028107106 1
267	Carbon Film 10 kohm 1/5 W J	3069103970 1	Contractive that the time the state of the s	50 V J 3519033935 1	Q304	KSC2690, NPN	2008602102 1				
268	Carbon Film 100 kohm 1/5 W J	3069104970 1	(C359) Not Used ! (AX-747)		Q305	KSA1220, PNP	2008202101 1		RESISTORS	7 1 1 4 7 14 1	0000470070 4
269	Carbon Film 12 kohm 1/5 W J	3069123970 1	The second secon	50 V M 3479347971 1	Q306	KSA1220, PNP	2008202101 1	R301		.7 kohm 1/5 W J	3029472970 1
			(C360) Not Used ! (AX-747)		(0306)	Not Used ! (AX-747)		R302		0 ohm 1W J	3029100470 1
	MISCELLANEOUS		Life of the product to the control of the control o	50 V M 3519102935 1	Q307	KTC3198Y, NPN	2208606104 1	R303		00 ohm 1/5 W J	3029101970 1
-TAL201	Crystal, CST4.19MHz	3938101880 1	(C361) Not Used ! (AX-747)		Q308	KTC3198Y, NPN	2208606104 1	R304	Mylar 0.04	17 uF 100 V J	3679473120 1
	FIP, 15BW16Y	2328130931 1		50 V J 3519270935 1	(Q308)	Not Used! (AX-747)		(R304)	Not Used! (AX-747)		
	Switch, Tact	4658003710 16	C363 Not Used ! (AX-747)		Q309	KTC3198Y, NPN	2208606104 1	R305-R308		22 ohm 1/5 W J	3029220970 4
			C364/C365 Electrolytic SG 0.47 uF	50 V M 3479347971 2	Q311	KSA1220, PNP	2008202101 1	(R305-R308	3) Not Used ! (AX-747)		
			C366 Ceramic Tubular 27 pF	50 V J 3519270935 1	(Q311)	Not Used ! (AX-747)		R309		20 kohm 1/5 W J	3069203970 1
СВЗ	ASSEMBLY P.C.BOARD MAIN		C367 Ceramic Tubular 470 pF	50 V J 3519471935 1	Q312	KSA1220, PNP	2008202101 1	R310	Metal Film 1	10 ohm 1W J	3029100470 1
	CAPACITORS		(C367) Not Used ! (AX-747)		Q314/Q315	KTC3198Y, NPN	2208606104 2	R311-R314	Metal Film 2	22 ohm 1/5 W J	3029220970 14
301		3479347071 1	C368 Ceramic Tubular 0.001 uF	50 V M 3519102935 1	Q316	MPSA56Y, PNP	2208206113 1	R315	Metal Film 1	10 ohm 1W J	3029100470 1
302-C304	Not Used!		C369 Electrolytic SG 0.47 uF	50 V M 3479347971 1	Q317	KTC3198Y, NPN	2208606104 1	(R315)	Not Used ! (AX-747)		
305	Mylar 0.047 uF 100 V J	3679473120 3	(C369) Not Used ! (AX-747)		Q318	KSC2690, NPN	2008602102 1	R316	Metal Film 18	30 ohm 1/5 W J	3029181970 1
306	Not Used!	55.55.25		50 V J 3519120935 1	(Q318)	Not Used ! (AX-747)		R317	Carbon Film 10	00 kohm 1/5 W J	3069104970 1
		3479310071 1	• • • • • • • • • • • • • • • • • • • •	50 V J 3519471935 2	Q319	KSC2690, NPN	2008602102 1	R318		.7 kohm 1/5 W J	3029472970 1
307			•	50 V J 3519033935 1	Q320/Q321	KTC3198Y, NPN	2208606104 2	R319		39 ohm 5W J	3059039776 1
308 200	,	5575475125	• • • • • • • • • • • • • • • • • • • •	50 V J 3519471935 1	Q322	DTC114YS	2208622106 1	(R319)	Not Used! (AX-747)	- · · · · · · · · · · · · · · · · · · ·	
308)	Not Used ! (AX-747)	3679473120 1	(C374) Not Used ! (AX-747)	55 7 3 55 (347 (355 )		Not Used! (AX-747)	2200022100 1	R320	1500	39 ohm 5W J	3059039776 1
09	Mylar 0.047 uF 100 V J		110000000000000000000000000000000000000	50 V M 3519102935 1	(0322)	DTA114YS/KRM107M	2238006103 1	R321		1 kohm 1/5 W J	3029102970 1
10		3419547225 1			Q323			R322		.7 kohm 1/5 W J	3029272970 1
1	Mylar 0.047 uF 100 V J	3679473120 1	,,,	16 V M 3479347031 2	Q324	KTA1024, PNP	2208206115 1	(R322)	Not Used ! (AX-747)		302321231U
11)	Not Used ! (AX-747)		C378-C379 Not Used !		(Q324)	Not Used ! (AX-747)		CONTRACTOR OF STREET AND TO	SP. 44	7 kohm 1/5\N/ I	2020472070 4
12-C315				50 V F 3519104935 1	Q325	DTA114YS/KRM107M	2238006103 1	R323		.7 kohm 1/5 W J	3029472970 1
6,	Ceramic Tubular 220 pF 50 V J	3519221935 1	C382 Not Used!		(Q325)	Not Used ! (AX-747)		(R323)	Not Used ! (AX-747)	00 -b 4/5 \A/	2000224070 4
16)	Not Used ! (AX-747)				Q326	DTC114YS	2208622106 1	R324		30 ohm 1/5 W J	3029331970 1
7	Ceramic Tubular 220 pF 50 V J	3519221935 1	CONNECTORS		Q327	DTA114YS/KRM107M	2238006103 1	R325		.7 kohm 1/5 W J	3029272970 1
18	Mylar 0.047 uF 100 V J	3679473120 1	CNT201 Wafer, FPC, 21P	4428526330 1	Q328	KTC3198Y, NPN	2208606104 1	R326	Metal Film	1 kohm 1/5 W J	3029102970 1
19	Electrolytic SD 4700 uF 25 V M	3409347248 1	CNT301 Wafer LV, 3P	4428525790 1	Q329	KTC3198Y, NPN	2208606104 1	(R326)	Not Used ! (AX-747)		
!1	Electrolytic HS 4700 uF 50 V M	3419547225 1	CNT302 Wafer, 3P	4428505710 1	(Q329)	Not Used ! (AX-747)		R327	Metal Film 22	20 ohm 1/5 W J	3029221970 1
22		3519102935 1	CNT304 Wafer, 6P	4428505810 1	Q330	KTD1302, NPN	2208606112 1	R328	Carbon Film 1	10 kohm 1/5 W J	3069103970 1
322)	Not Used! (AX-747)		CNT306 Wafer, 2P	4428508210 1	(Q330)	Not Used ! (AX-747)		R329	Metal Film 47	70 ohm 1/5 W J	3029471970 1
23		<b>351910293</b> 5 1	CNT307 Wafer, 15P	4428551520 1	Q331	KTA1024, PNP	2208206115 1	R330	Metal Film 4	17 ohm 1/5 W J	3029470970 1
25 25	Electrolytic SG 2200 uF 25 V M		CNT309 Wafer, 15P	4428525360 1	(Q331)	Not Used ! (AX-747)		R331	Carbon Film 2	22 kohm 1/5 W J	3069223970 1
		3479310071 1	OTTTOOS TRAIGIT, TOT		Q332	KTA1024, PNP	2208206115 1	R332		70 ohm 1/5 W J	3029471970 1
26		3479310071	DIODES		Q333	KTC3206, NPN	2208606118 1	R333		.7 kohm 1/5 W J	3029472970 1
326)	Not Used ! (AX-747)	2670472420 4		2058322101 1			2208606118 2	R334		17 kohm 1/5 W J	3069473970 1
27	Mylar 0.047 uF 100 V J		D301 1N4148, Switching		Q334/Q335		2208606118 2	R335		20 ohm 1/5 W J	3029221970 1
28	Ceramic Tubular 220 pF 50 V J		D302 Zener, UZ 30.0 BSD	2258599128 1	<b>₹</b> 9500 0 € 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5) Not Used ! (AX-747)	000000101			20 01111 1/3 44 3	3029221970
29	Ceramic Tubular 220 pF 50 V J	3519221935 1	D303 Zener, UZ 6.2 BSB	2258599105 1	Q336	KTC3198Y, NPN	2208606104 1	(R335)	Not Used ! (AX-747)	15 Junton 4/5 \A/ 1	2000452070 4
329)	Not Used ! (AX-747)		D304-D312 1N4003, Rectifier	2258128002 9	(Q336)	Not Used ! (AX-747)		R336		15 kohm 1/5 W J	3069153970 1
30	Electrolytic SG 1 uF 50 V M	3479310971 1	D313 1N5402, Rectifier	2058100136 1	Q337	KTC3198Y, NPN	2208606104 1	(R336)	Not Used! (AX-747)		
31	Mylar 0.047 uF 100 V J	3679473120 1	D314 1N4148, Switching	2058322101 1	Q338	KTC3198Y, NPN	2208606104 1	R337		20 ohm 1/5 W J	3029221970 1
31)	Not Used ! (AX-747)		(D314) Not Used ! (AX-747)		(Q338)	Not Used! (AX-747)		R338		70 ohm 1/5 W J	3029471970 1
2	Electrolytic SG 100 uF 16 V M	3479310131 1	D315 1N5402, Rectifier	2058100136 1	Q339/Q340	KTC3198Y, NPN	2208606104 2	R339	Metal Film 3.	.3 kohm 1/5 W J	3029332970 1
33	Ceramic Tubular 470 pF 50 V J	3519471935 1	D316 1N4148, Switching	2058322101 1	Q341	KTC3198Y, NPN	2208606104 1	R340	Metal Film 22	20 ohm 1/5 W J	3029221970 1
34	Electrolytic SG 220 uF 16 V M	3479322131 1	D317/D318 1N5402, Rectifier	2058100136 2	(Q341)	Not Used ! (AX-747)		R341	Carbon Film 1	15 kohm 1/5 W J	3069153970 1
35	Mylar 0.047 uF 100 V J		D319 Zener, UZ 11.0 BSC	2258599122 1	Q342	KTC2240/BKTC3200, NPN	2208606108 1	(R341)	Not Used! (AX-747)		
37	,	3519221935 2	D320-D324 1N4148, Switching	2058322101 5	(Q342)	Not Used ! (AX-747)		R342	Metal Film 4.	.7 kohm 1/5 W J	3029472970 1
	Not Used ! (AX-747)		(D320-D324) Not Used ! (AX-747)		Q343	KTC3206, NPN	2208606118 1	(R342)	Not Used ! (AX-747)		
38		3519221935 2	D325 1N4148, Switching	2058322101 1	Q344	KTA1024, PNP	2208206115 1	R343	UNITY TO STATE OF THE STATE OF	33 ohm 1 W J	3029330570 1
99		3479310071 1	(D325) Not Used! (AX-747)		Q345	KTC2240/BKTC3200, NPN	2208606108 1	R344		39 ohm 5W J	
en en van van van van van van van van van va		0470010011	D326 1N4148, Switching	2058322101 1	(Q345)	Not Used ! (AX-747)		(R344)	Not Used ! (AX-747)		
19) NG244	Not Used! (AX-747) Electrolytic SG 10 uF 50 V M	3479310071 2	D327 1N4148, Switching	2058322101 1	Q346/Q347	KTC3198Y, NPN	2208606104 2	R345	11.1.1	39 ohm 5W J	3059039776 1
40/C341		3519102935 1		200022101	Q348	KTC31981, NPN KTD1302, NPN	2208606104 2	R346		22 ohm 1/5 W J	3029220970 1
12 	MALACA	33 13 102333 1	2000 A 2000 2000 A	2258599122 1	5. * 000 MOVE (MIN. \$18.00 L	Not Used ! (AX-747)	2200000112 1	R347		1 kohm 1/5 W J	3029102970 1
42)	Not Used! (AX-747)	251010202F 4	D328 Zener, UZ 11.0 BSC		(Q348)	DTA114YS/KRM107M	2238006102 1	R348		1 kohm 1/5 W J	
3		3519102935 1	D329 Zener, UZ 5.1 BSB	2258599103 1	Q349	1.0	2238006103 1		59	, KOIIII I/J VV J	3023102310
4		3519221935 2	D330-D335 1N4148, Switching	2058322101 6	(Q349)	Not Used ! (AX-747)	0000000400	(R348)	Not Used ! (AX-747)	00 ahm 4/5\4/ !	2020404070 4
44)	Not Used ! (AX-747)		D336 Zener, UZ 27 BSC	2258599115 1	Q350/Q351	KTC2240/BKTC3200, NPN	2208606108 2	R349		00 ohm 1/5 W J	
15		3519221935 2	(D336) Not Used ! (AX-747)		Q352-Q355		2208606108 4	R350		.7 kohm 1/5 W J	3029272970 1
<b>1</b> 6	Ceramic Tubular 12 pF 50 V J	3519120935 1	D337/D338 1N4148, Switching	2058322101 2	(Activities of Committee of Com	5) Not Used ! (AX-747)		(R350)	Not Used ! (AX-747)	<b>9</b> 1 . b	
46)	Not Used ! (AX-747)		D339 Zener, UZ 27 BSC	2258599115 1	Q356	DTC114YS	2208622106 1	R351		.7 kohm 1/5 W J	
7	Ceramic Tubular 3.3 pF 50 V J	3519033935 1			(Q356)	Not Used ! (AX-747)		R352	19547	30 ohm 1/5 W J	3029331970 1
47)	Not Used ! (AX-747)		INTEGRATED CIRCUITS		Q357/Q358	KTD1302, NPN	2208606112 2	(R352)	Not Used ! (AX-747)		
8	Mylar 0.047 uF 100 V J	3679473120 1	IC301 KTB1367Y/2SB1367Y, NPN	2028106109 1	Q359	DTC114YS	2208622106 1	R353		.7 kohm 1/5 W J	3029472970 1
48)	Not Used ! (AX-747)		IC302 KA7912, Regulator	2168602113 1	Q360/Q361	DTA114YS/KRM107M	2238006103 2	R354		17 kohm 1/5 W J	3069473970 1
9		3479247111 1	IC303 KA7805, Regulator	2108499104 1	Q371	2SD718/KTD718, NPN	2028407109 1	R355	Metal Film 1.	.5 kohm 1/5 W J	3029152970 1
0/C351	Electrolytic SG 10 uF 50 V M		· •		Q372	2SC4137, Bias	2008622110 1	R356	Carbon Film 1	2 kohm 1/5 W J	3069123970 1
52	Ceramic Tubular 12 pF 50 V J		COILS		Q373	2SB688/KTB688, PNP	2028107106 1	R358	Carbon Film 3	33 kohm 1/5 W J	3069333970 1
i3	Ceramic Tubular 12 pF 50 V J		L301/L302 Inductor, 0.5 uH	2648001010 2	Q374	2SD718/KTD718, NPN	2028407109 1	(R358)	Not Used ! (AX-747)		•
A CONTRACTOR OF THE PARTY OF TH	Not Used ! (AX-747)		(L301/L302) Not Used ! (AX-747)		Q375	2SC4137, Bias	2008622110 1	R359	3500	2 kohm 1/5 W J	3069123970 1
353) 354		3519270935 1	L303/L304 Inductor, 0.5 uH	2648001010 2	Q376	2SB688/KTB688, PNP	2028107106 1	(R359)	Not Used ! (AX-747)		
	1990	30.02.3000	COOREDOT HIGGOIDI, U.O GIT	_5,555,510	Q377	2SD2059/KTD2059, NPN	2028406123 1	R360	Janes	33 kohm 1/5 W J	3069333970 1
(54) 55	Not Used ! (AX-747)  Ceramic Tubular 3.3 pF 50 V J	3519033935 1	TRANSISTORS		Q378	2SC4137, Bias	2008622110 1	(R360)	Not Used ! (AX-747)		
155 15610357				2208206113 1		KTB1367Y/2SB1367Y, NPN			\$14.14	2 kohm 1/5 W J	3069123970 2
6/C357	Electrolytic SG 47 uF 16 V M	J413J41UJI Z	Q301 MPSA56Y, PNP	£200200113	Q379	KID10011120D10011, NPN	2028106109 1	N30 1/N362	Jai Doll I III II	~ KOIIII 175 VV J	300312331U Z

Ref. No.	Description		Part No. Q'ty Version	TOT. TO.	Ref
(R361/R362)	Not Used ! (AX-747)			(R420) Not Used ! (AX-747)	PC
R363	Metal Film	330 ohm 1/5 W J	3029331970 1	R421 Wetai Fill 120 0/11/1 1/3 V 3 30231213/6 1	44.000
	Metal Film	4.7 kohm 1/5 W J	3029472970 1	R422 Calbon Film 35 Komm 1/5 VV 3 000000070 1	C80
	Carbon Film	12 kohm 1/5 W J	3069123970 1	R423 Calbuit Fill So Kellil 1/5 44 6 Coccessor 1	CN
	Metal Film	330 ohm 1/5 W J	3029331970 1	(R423) 140( USEU : (777-141)	(CN
	Carbon Film	12 kohm 1/5 W J	3069123970 1	N424 Wickellinit Goo offit 175 VV b GG2GGGTGTG .	CN
	Metal Film	4.7 kohm 1/5 W J	3029472970 1	R425 Calbull Fill) 2 Rollin 175 44 5 5555252575 1	F80
	Carbon Film	6.8 kohm 1/5 W J	3069682970 1	R420/R427 Calpuli IIII 30 Rollii 1/5 VV 5 CCCCCCC 2	(F8
	Metal Film	4.7 kohm 1/5 W J	3029472970 1	R428 Carbon Film 33 kohm 1/5 W J 3069333970 1	F80
		220 ohm 1/5 W J	3029221970 1	(R428) Not Used ! (AX-747)	(F8
CONTRACTOR	Metal Film	220 01111 1/3 17 3	502522.5.5	R429 Metal Film 1.8 kohm 1/5 W J 3029182970 1	32
(R371)	Not Used! (AX-747)	6.8 kohm 1/5 W J	3069682970 1		(32
R372	Carbon Film		3069153970 1	R431 Carbon Film 33 kohm 1/5 W J 3069333970 1	
R374	Carbon Film	15 kohm 1/5 W J	3069103970 1		
R375	Carbon Film	10 kohm 1/5 W J	3029332970 2	A COLOR OF THE COL	
R376/R377	Metal Film	3.3 kohm 1/5 W J		######################################	
R378	Metal Film	120 ohm 1/5 W J	3029121970 1	1,100	
(R378)	Not Used ! (AX-747)		0000100070 4		
R379	Metal Film	1 kohm 1/5 W J	3029102970 1	1400/1400 Motel / mit	
(R379)	Not Used ! (AX-747)				
R380	Metal Film	2.2 kohm 1 W J	3029222470 1	Weter in the second sec	
(R380)	Not Used ! (AX-747)			R439 Metal Film 4.7 kohm 1/5 W J 3029472970 1	
R381	Carbon Film	15 kohm 1/5 W J	3069153970 1	R440 Metal Film 1 kohm 1/5 W J 3029102970 1	
R382	Metal Film	120 ohm 1/5 W J	3029121970 1		
(R382)	Not Used ! (AX-747)			FUSES	
R383	Metal Film	120 ohm 1/5 W J	3029121970 1	F301/302 AT 1.6 A, 250 V 5508302335 2 A,D,PT INDO	
R384	Metal Film	3,3 kohm 1/5 W J	3029332970 1	(F301/302) △ NB 1.5 A, 250 V 5508202230 2 KS	
R385/R386	Metal Film	120 ohm 1/5 W J	3029121970 2	F303/304 AT 1 A, 250 V 5508302035 2 A,D,PT INDO	
	Not Used ! (AX-747)			(F303/304) △ NB 1 A, 250 V 5508100851 2 KS	
Patricia and Control of the Control	Metal Film	1 kohm 1/5 W J	3029102970 1		
R387	Not Used ! (AX-747)			MISCELLANEOUS	
(R387)		1 kohm 1/5 W J	3029102970 1	RLY301	
R388	Metal Film	3.3 kohm 1/5 W J	3029332970 2	GND301 Terminal Ground 4235007310 1	
R389/R390	Metal Film	3.3 KOIIII 1/3 VV 0	00200020.0	24 Terminal, Speaker, 4P 4408105410 2	
2040604-00-40-00-00-00-00-00-00-00-00-00-00-0	Not Used ! (AX-747)	1 kohm 1/5 W J	3029102970 1	25 Terminal, Speaker, 2P 4408107010 1	
R391	Metal Film	1 KONIN 1/3 VV J	3029102370	34 Heatsink, Regulator 7505206230 3	
(R391)	Not Used ! (AX-747)	40 tishes 4/E M 1	3069103970 1	Of Troubling regulator	
R392	Carbon Film	10 kohm 1/5 W J	3009103370		
(R392)	Not Used! (AX-747)	4514	3069333970 1	PCB4 ASSEMBLY P.C.BOARD VOLUME	
R393	Carbon Film	33 kohm 1/5 W J		42.00.000000000000000000000000000000000	
R394	Carbon Film	2 kohm 1/5 W J	3069202970 1	CAPACITORS  C.501 Electrolytic SG 100 uF 16 V M 3479310131 1	
(R394)	Not Used ! (AX-747)				
R395	Carbon Film	10 kohm 1/5 W J	3069103970 1		
(R395)	Not Used ! (AX-747)				
R396	Carbon Film	2 kohm 1/5 W J	3069202970 1	C504 Electrolytic SG 47 uF 16 V M 3479347031 1	
(R396)	Not-Used ! (AX-747)				
R397	Metal Film	1 kohm 1/5 W J	3029102970 1	CONNECTORS	
(R397)	Not Used ! (AX-747)			CNT501 Wafer, 2P 4428508210 1	
R398	Carbon Film	33 kohm 1/5 W J	3069333970 1	CNT202 Wafer, 10P 4428810995 1	
(R398)	Not Used ! (AX-747)			CNT101 Wafer, 21P 4428526750 1	
R399	Carbon Film	10 kohm 1/5 W J	3069103970 1		
R400	Metal Film	1 kohm 1/5 W J	3029102970 1	TRANSISTORS	
R401	Metal Film	1 kohm 1/5 W J	3029102970 1	Q501 DTC114YS 2208622106 1	
(R401)	Not Used ! (AX-747)			Q502/Q503 KTA1015Y/BKTA1266, PNP 2208206105 2	
R402	Carbon Film	2 kohm 1/5 W J	3069202970 1	Q504/Q505 KTC3198Y, NPN 2208606104 2	
R403	Metal Film	390 ohm 1/5 W J	3029391970 1		
(R403)	Not Used ! (AX-747)			RESISTORS	
R404	Metal Film	1 kohm 1/5 W J	3029102970 1	R501/R502 Metal Film 1 kohm 1/5 W J 3029102970 2	
(R404)	Not Used ! (AX-747)			R503 Metal Film 220 ohm 1/5 W J 3029221970 1	
PACK PROGRAM PROPERTY OF A STATE OF	Metal Film	120 ohm 1/5 W J	3029121970 1	R505/R506 Metal Film 1 kohm 1/5 W J 3029102970 2	
R405	Carbon Film	10 kohm 1/5 W J	3069103970 1	R507 Metal Film 1.5 kohm 1/5 W J 3029152970 1	
R406	Carbon Film	2 kohm 1/5 W J	3069202970 1	R508/R509 Metal Film 1 kohm 1/5 W J 3029102970 2	
R407		33 kohm 1/5 W J	3069333970 1	R510/R511 Metal Film 4.7 kohm 1/5 W J 3029472970 2	
R408	Carbon Film	33 KOHHI 1/3 W 3	300300070		
(R408)	Not Used ! (AX-747)	390 ohm 1/5 W J	3029391970 1	MISCELLANEOUS	
R409	Metal Film	390 ohm 1/5 W J	0020001010	VR501 Semi Fixed Resistor, 50 k(B) 3248050353 1	
(R409)	Not Used ! (AX-747)	2.2 kehm 4/E1A/ 1	3029332970 1	1 Volume, Motor 3228020010 1	
R410	Metal Film	3.3 kohm 1/5 W J		Volume, motor	
R411	Metal Film	2.2 kohm 1 W J	3029222470 1 3029102970 1		
R412	Metal Film	1 kohm 1/5 W J		PCB5 ASSEMBLY P.C.BOARD HEADPHONE	
R413	Metal Film	120 ohm 1/5 W J	3029121970 1		
R414/R415	Metal Film	1.2 kohm 1/5 W J	3029122970 2	100001000000	
(R414/R415)	Not Used ! (AX-747)		0000000070	0,11,100	
R416	Carbon Film	2 kohm 1/5 W J	3069202970 1	1100005510	
(R416)	Not Used ! (AX-747)			5 Jack, Phone 4438005510 1	
R417	Metal Film	1 kohm 1/5 W J	3029102970 1		
R418	Carbon Film	2 kohm 1/5 W J	3069202970 1	ANNEAR DE LA COMPANION DE LA C	
(R418)	Not Used ! (AX-747)			PCB6 ASSEMBLY P.C.BOARD VOLUME LED	
R419	Carbon Film	33 kohm 1/5 W J	3069333970 1	CNT701 Connector, Lead Ass'y, 2P, 140mm 435102143481 1	
R420	Metal Film	3.3 kohm 1/5 W J	3029332970 1	LED701 LED, SLH-34K-3 2308220142 1	
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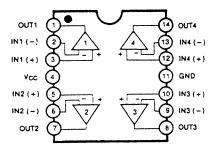
Ref. No.	Description	Part No.	Qty	version
PCB7	ASSEMBLY P.C.BOARD VOLTAG	E		
C801	Not Used!			
CNT801	Connector, Wafer LV, 4P	4428525780	1	A,D,PT INDO
(CNT801)	Connector, Wafer LV, 2P	4428525800	1	PT INDO
CNT802	Connector, Wafer LV, 2P	4428100291	1	
F801	↑ Fuse, T 2A, 250V	5508302435	1	PT INDO
(F801)	Not Used!			A,D,KS
F802		5508302735	1	A,D,KS
(F802)	⚠ Fuse, NB 3.5A, 250V	5508202830	1	PT INDO
32	Plate, Ground	6165143510	1	A,D,KS
(32)	Switch, Slide	4618006510	1	PT INDO

# IC FUNCTIONAL BLOCK DIAGRAM

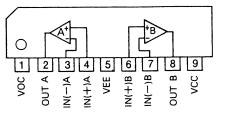




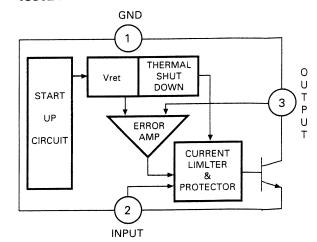
#### IC102/IC103: KA324



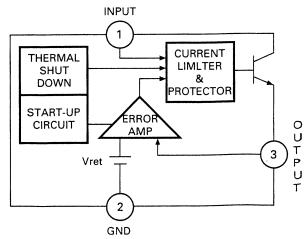
#### IC102, IC103, IC104, IC105, IC106 : KIA4559S/KIA75559S



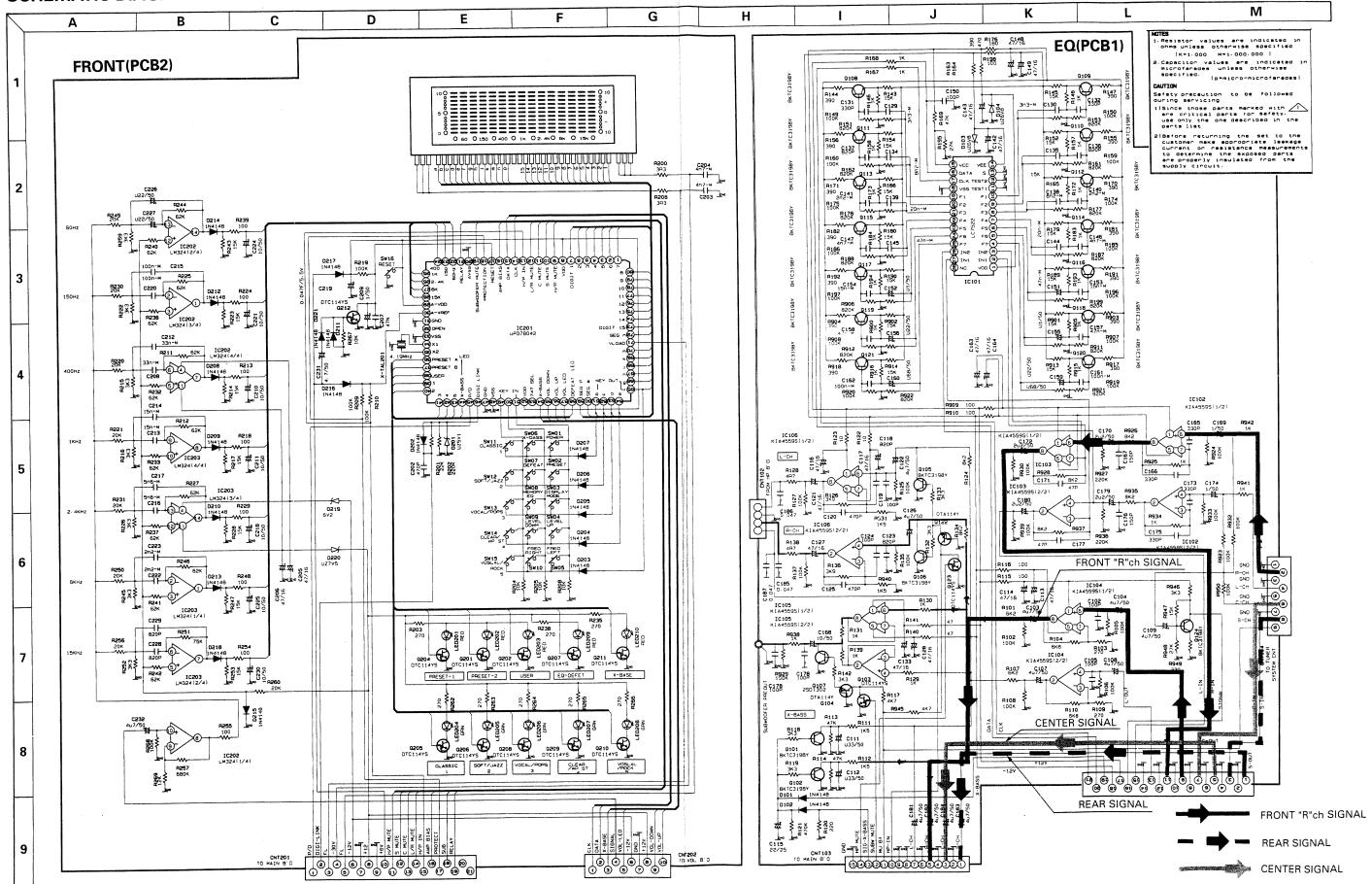
#### IC302 : KA7912



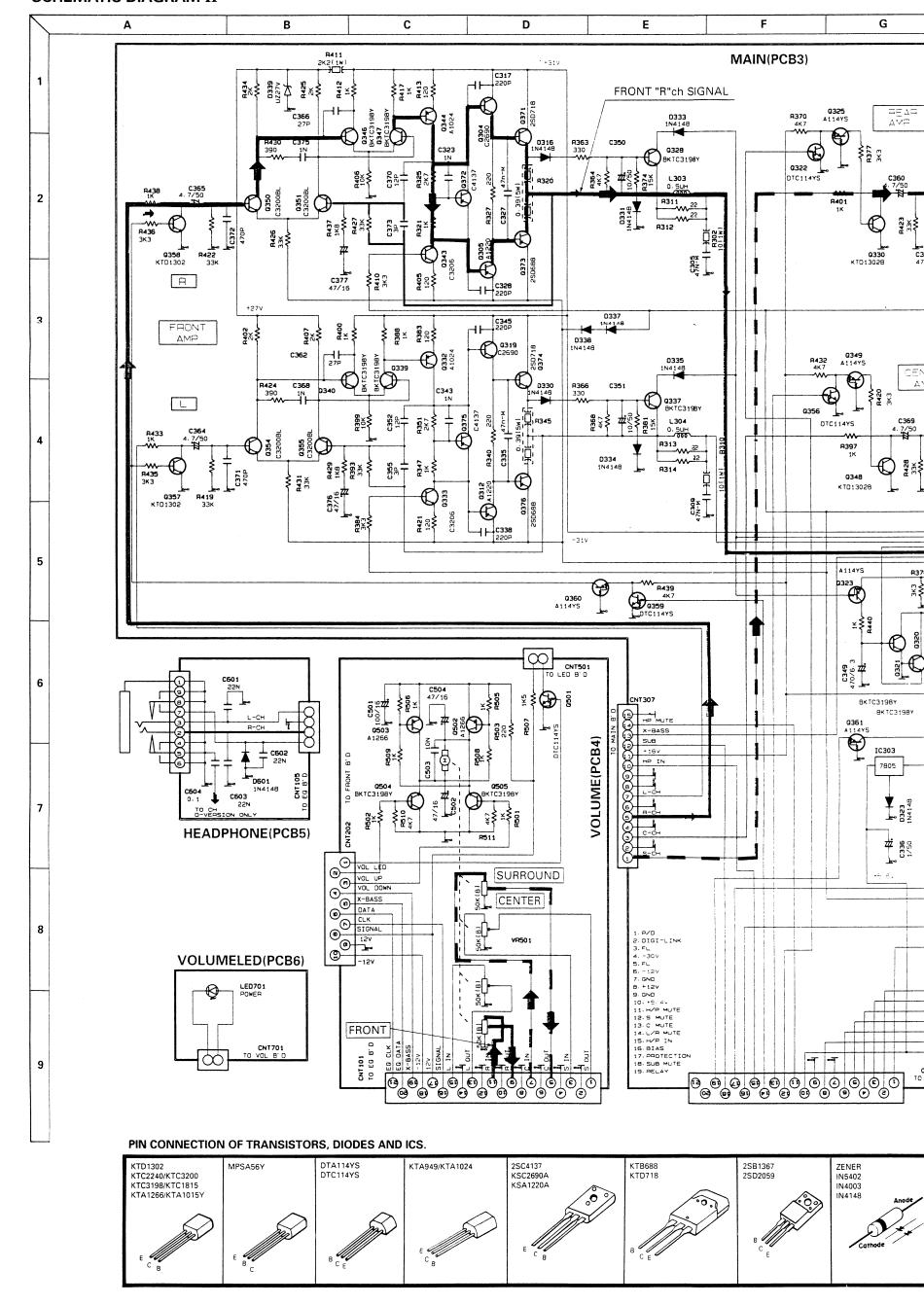
#### IC303:KA7805

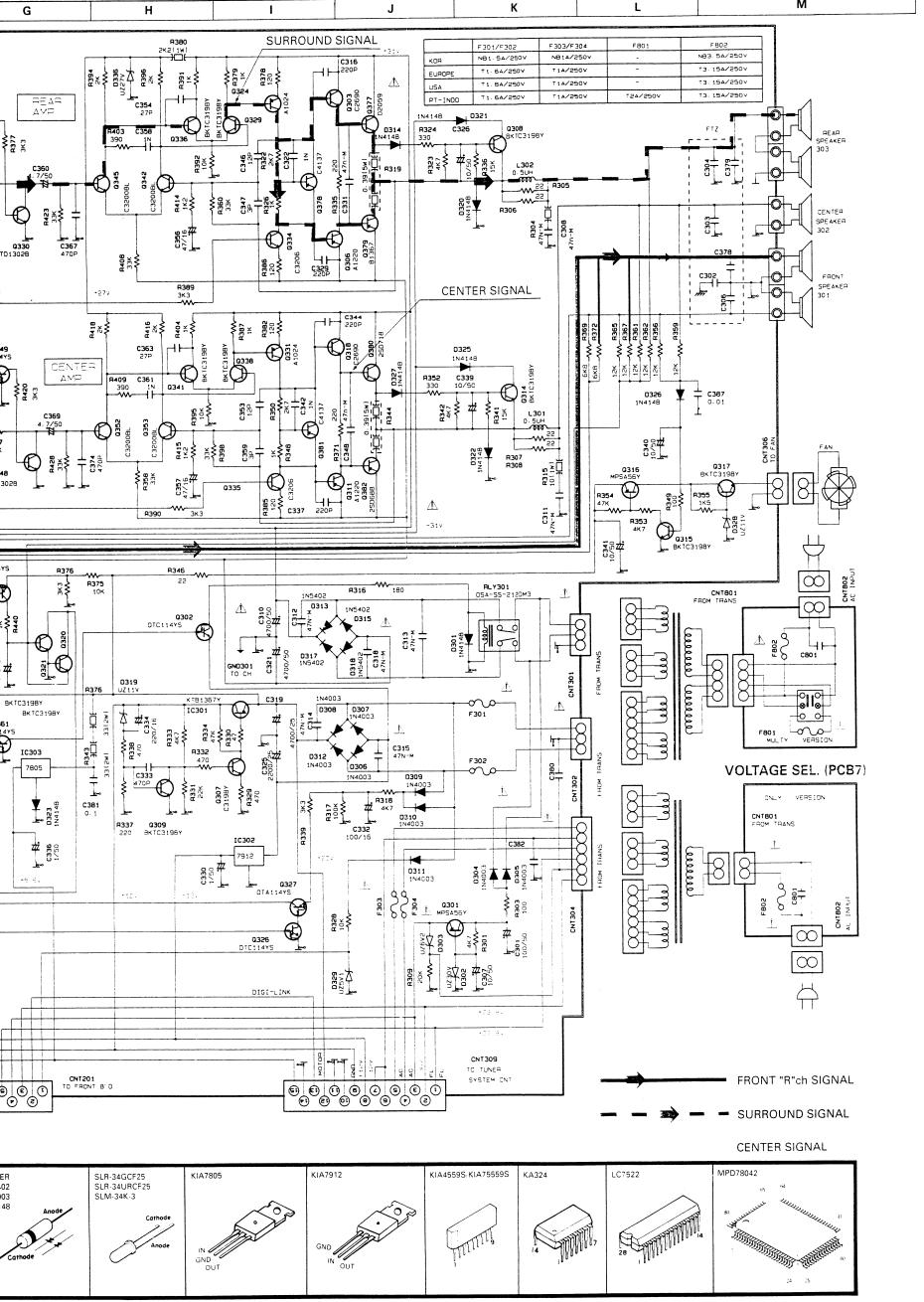


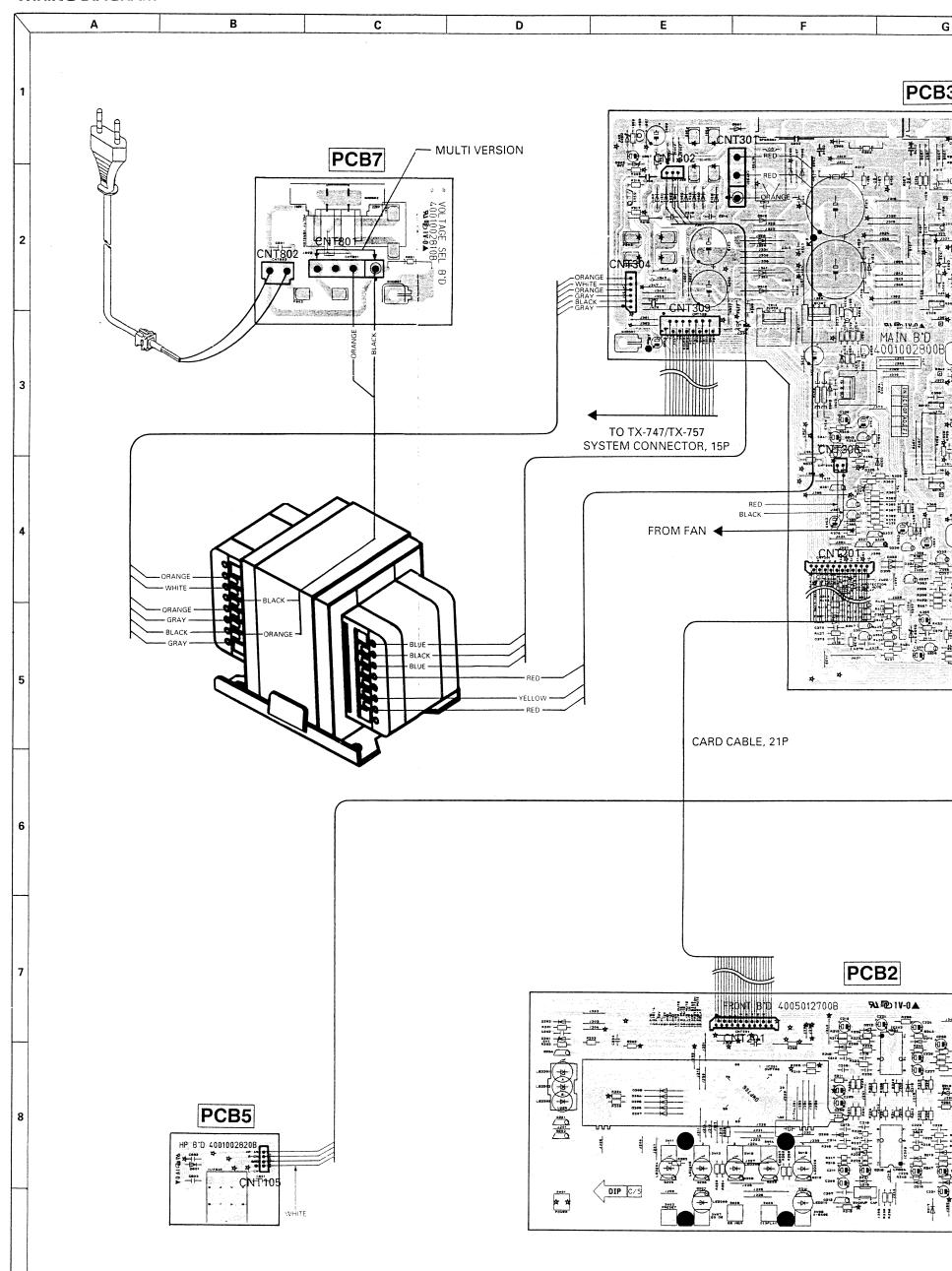


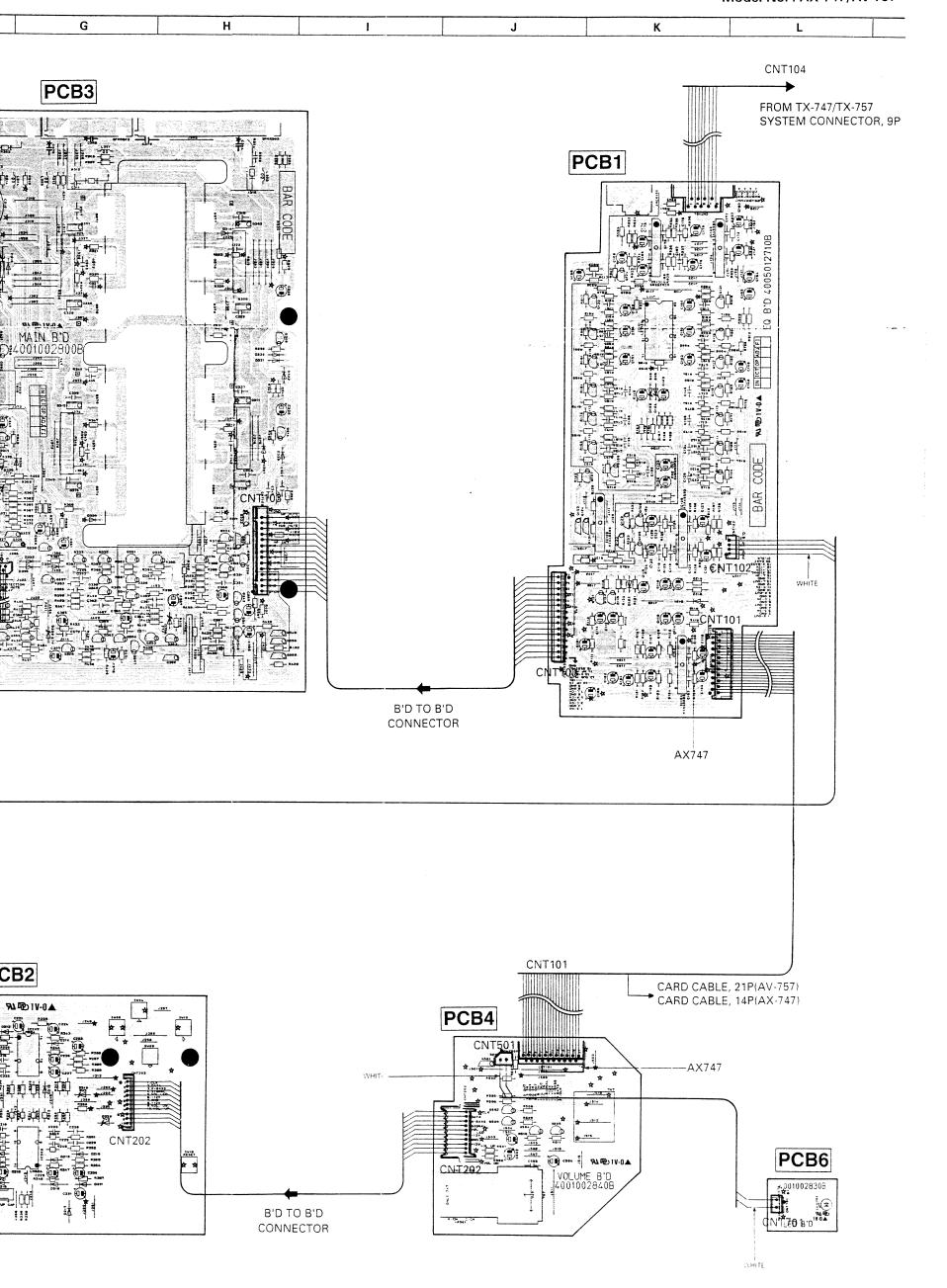


#### **SCHEMATIC DIAGRAM II**









# **TX-757/747**

# **SPECIFICATIONS**

\* Preparation: Output voltage setting at speaker terminal for measrement is 2 V (Input: VIDEO, 1kHZ. 250MV)

#### **FM SECTION**

- \* Measurement Condition
  - · Antenna input impedance: 75 ohms

Version	USA/Canada ("A")	Europe ("D")	Korea ("KS")	Multi ("PT INDO")
RF Signal		98.0 MHz	98.1 MHz	98.0 MHz

No.	Description		Unit	Nominal	Limit
1	Tuning Frequency Range	KS, A D, PT INDO	MHz		- 107.9 - 108.0
2	Scaning Frequency Interval	KS, A D, PT INDO	kHz	200 50	
3	FM De-emphasis	KS, A D, PT INDO	uS	75 50	
4	Usable Sensitivity 90.1/106.1 MHz, Stereo Mode, S/N=30 dB		u∨	≤1.5	≤3
5	50 dB Quieting Sensitivity S/N=50 dB (IHF BPF)		u∨	≤5	
6	Signal to Noise Ratio, 75 kHz Dev.	MONO STEREO (BPF)	dB	≥73 ≥70	≥67 ≥6 <b>4</b>
7	Total Harmonic Distortion at 1 kHz, 75 kHz Dev.	MONO STEREO (BPF)	%	≤0.2 ≤0.4	≤ 0.4 ≤ 0.8
8	Stereo Threshold		u∨	10±2	10±4
9	Muting Threshold		uV	10±2	10±4
10	Output Voltage with 1 kHz, DOLBY Tape (TCC-13) (Referance voltage setting: speaker output 2 V)	0)	mV	4000 ± 400	4000 ± 600
	Memory Holding Time		week dB	≥45	≥4 ≥40
12	Stereo Separation at 1 kHz, 98 MHz (IHF BPF)		1 45		

#### **AM SECTION**

- \* Measurement Condition
  - RF Signal: 999 kHz, 5 mV/m or 207 kHz, 5 mV/m  $\,$
  - MOD.: 400 Hz. 30%

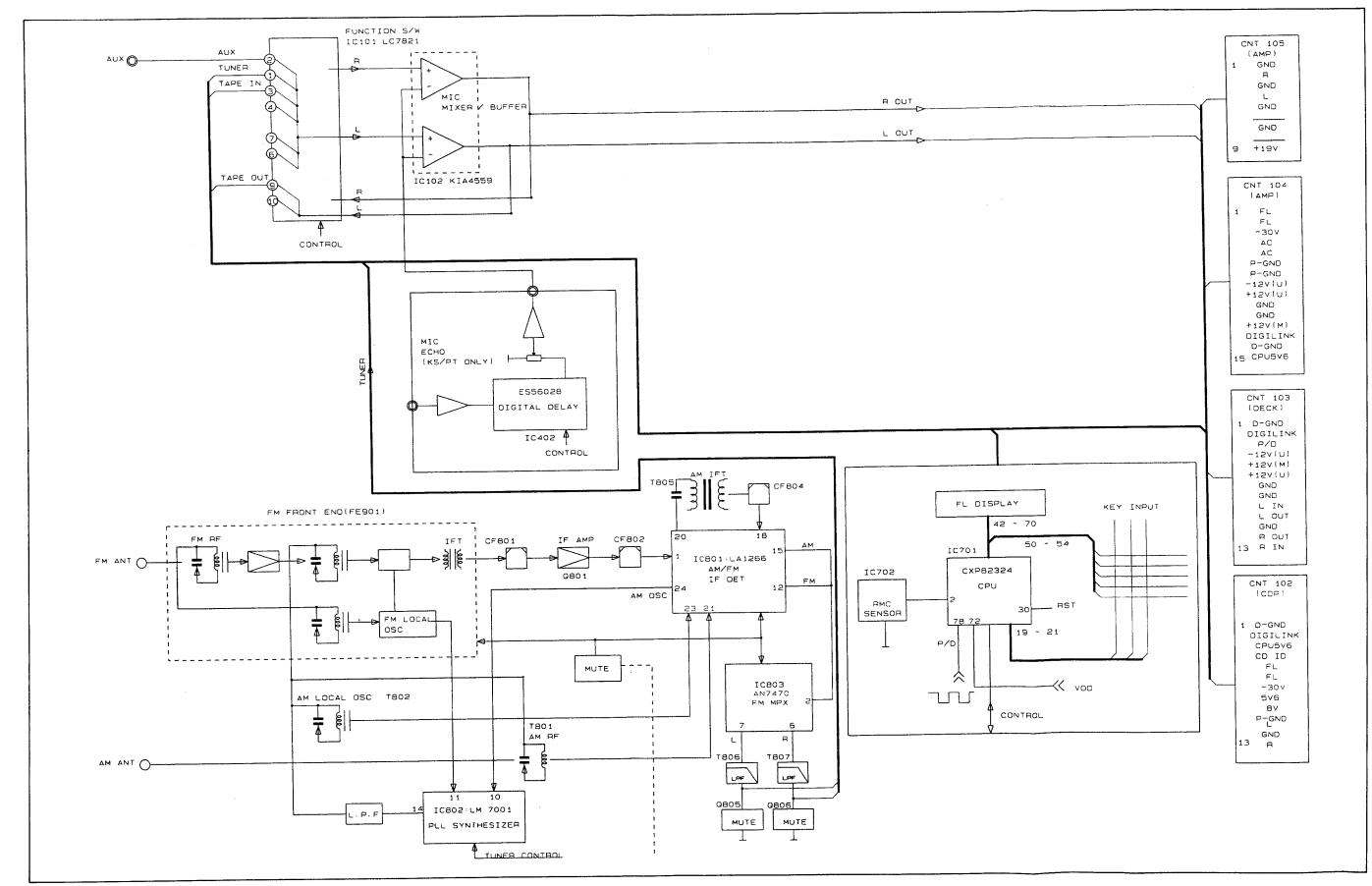
No.	Description		Unit	Nominal	Limit
1	Tuning Frequency Range	KS		522	~1611
'	Turning Frequency Francis	Α	kHz	520	ı~1710
		PT INDO	:	520/522	~1710/1611
		D		522~16°	11, 153~279
2	Scaning Frequency Interval	KS, D			9
_	Joanning Frequency more as	Α	kHz		10
		PT INDO			9/10
3	Usable Sensitivity, S/N=20 dB, 30% Mod.	600/1400 kHz	uV/m	≤600	≤ 1000
	Joseph Committee of the	162/252 kHz		≤1000	≤ 1300
4	Signal to Noise Ratio, 30% Mod.	999 kHz, 400 Hz	dB	≥40	≥ 36
7	olginal to realist realist	207 kHz, 400 Hz		≥ 35	≥30
5	Output Voltage, 400 Hz, 30% Mod., 5mV/m	DOLBY Tape			
	(Referance voltage setting: speaker output 2 V)	TCC-130	mV	$1500 \pm 400$	$1500 \pm 600$
6	Search Level		uV/m	$600 \pm 100$	$600 \pm 200$

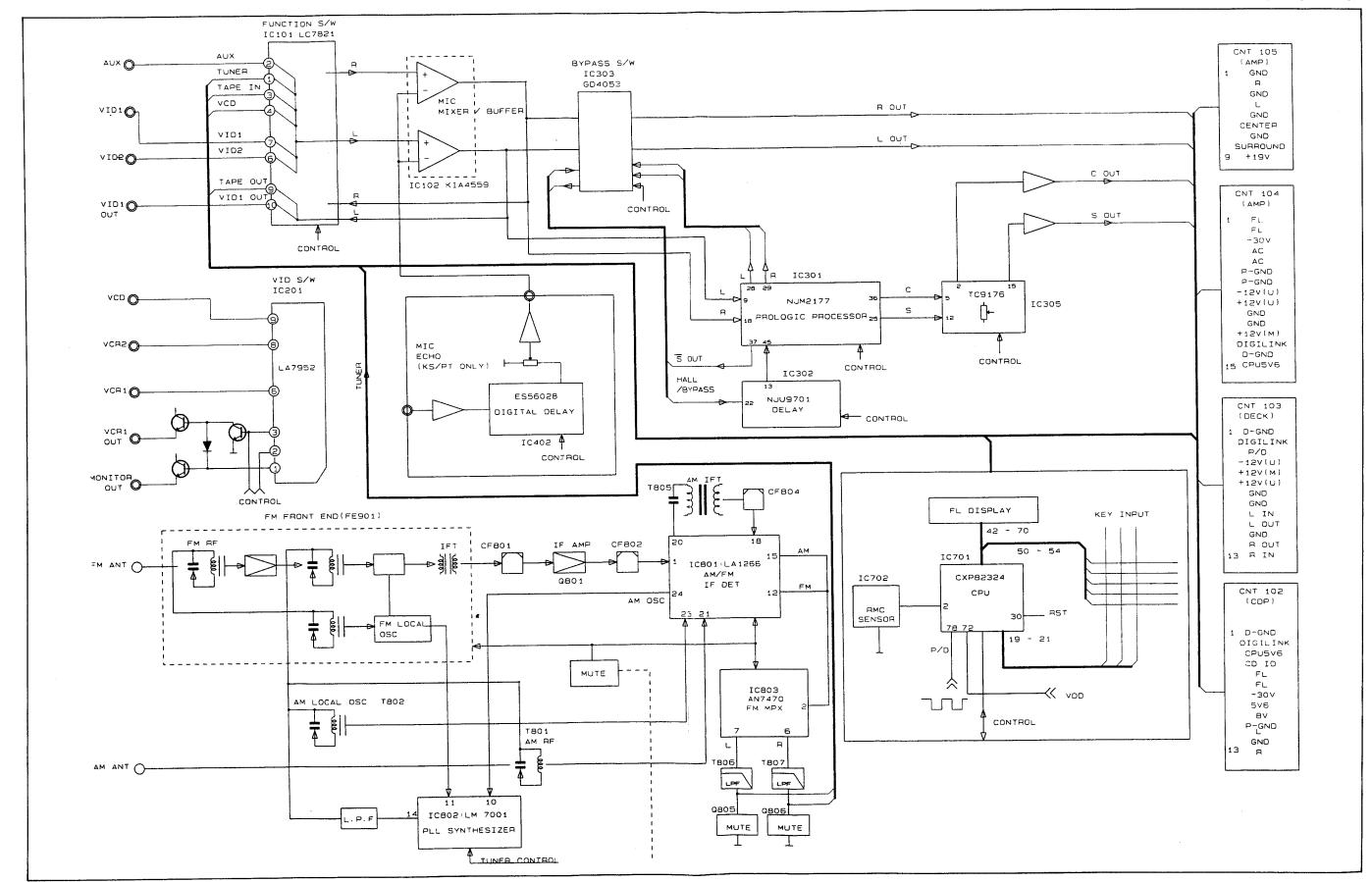
# **VIDEO SECTION (TX-757 ONLY)**

No.	Description	Unit	Nominal	Limit
1	Input Sensitivity/Impedance (75 Ω)	dB	$1Vp-p \pm 0.5$	1Vp-p ± 1
2	Output Voltage/impedance (75 Ω)	dB	$1Vp-p \pm 0.5$	1Vp-p ± 1
3	Frequency Response at ∓3 dB	Hz	10~6M	20~5M
4	Crosstalk at 1.0 MHz	dB	≥50	≥45
5	Signal to Noise Ratio at 1 MHz, Input shorted	dB	≥50	≥45

## **INPUT SECTION**

No	. Description	Unit	Nominal	Limit
1	Input Sensitivity			
	TV/AUX etc. (Impedance : 47 kohms) TX-757	mV	$250 \pm 20$	$250 \pm 40$
	AUX (Inpedance: 49 kohms) TX-747			
	MIC (Impedance: 600 ohms)		$2.5 \pm 0.2$	$2.5 \pm 0.5$
2	Output Voltage at TAPE REC	mV	$250 \pm 20$	$250 \pm 40$





#### DISASSEMBLY PROCEDURES

REFER TO PAGES 39 AND 52.

#### **OVER TOP REMOVAL.**

Remove 5 screws (9) (05 to 09) and then remove the Cover Top (9).

#### **2** FRONT PANEL ASSEMBLY REMOVAL

- 1. Remove the Cover Top 30, referring to then previous step 11.
- 2. Remove the Card Cable from wafer (CNT701) on the Main P.C.Board (PCB1)
- 3. Disconnect (CNT401) from the Main P.C.Board (PCB5).
- 4. Remove 7 screws (01 to 04), (01 to 03) and then remove the Front Panel Assembly (AA).

#### **3** MIC P.C.BOARD (PCB3) REMOVAL

- 1. Remove the Cover Top 30, referring to the previous step 11.
- 2. Remove the Front Panel Assembly (AA), referring to the previous step [2].
- 3. Remove 2 screw (9) (01, 02) and then remove the Mic PC.Board (PCB3)

#### 4 FRONT P.C.BOARD (PCB2) REMOVAL

- 1. Remove the Cover Top 30, referring to the prvious step [].
- 2. Remove the Front Panel Assembly (AA), reffering to the previous step 2.
- 3. Remove 9 screws (23 to 31) and then remove the Front P.CB.oard (PCB2).

#### 5 RMC P.C.BOARD (PCB5) REMOVAL

- Remove the Cover Top (3), referring to the prvious step □.
- 2. Remove the Front Panel Assembly (AA), reffering to the previous step [2].
- 3. Remove screw (22) and then remove (PCB5) by pressing the hooks arround it outward.

#### 6 MAIN P.C.BOARD (PCB1) REMOVAL

- 1. Remove the Cover Top 30, referring to the previous step 1.
- 2. Remove the Card Cable from wafer(CNT701) on the Main P.C.Board(PCB1).
- 3. Disconnect (CNT401, CNT102, CNT105) from the Main P.C.Board(PCB1).
- 4. Disconnect (CP501) from the Voltage P.C.Board (PCB4).

- 5. Remove 2 screw § (03), § (01) on the Main P.C.Board(PCB1).
- 6. Remove 9 screws (14 to 20, 11, 21) from the Chassis Back (TX-757).

  Remove 6 screw (14, 15, 19, 20, 21,11) from the Chassis Back (TX-747).

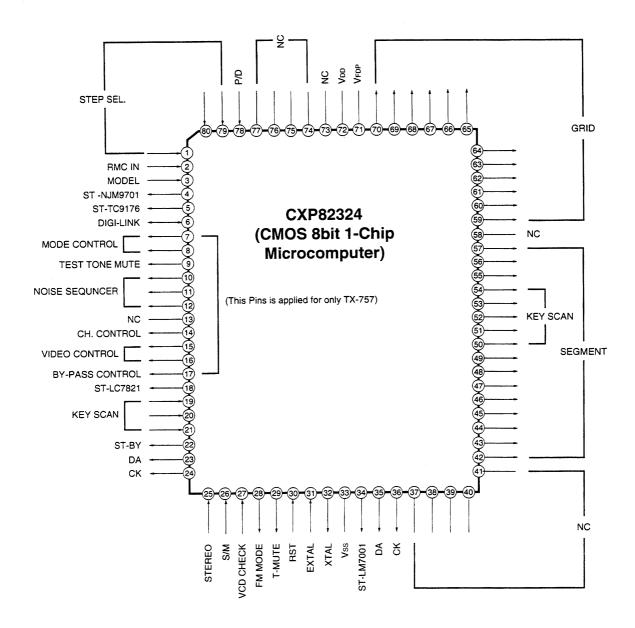
#### **7** VOLTAGE P.C.BOARD(PCB4) REMOVAL

- 1. Remove the Cover Top 30, referring to the previous step 11.
- 2. Disconnect (CP501) from the Voltage P.C.Board(PCB4).
- 3. Remove 2 screws 64 (01, 02).
- 4. Remove the Fastener (3) and then remove the Voltage P.C.Board(PCB4).

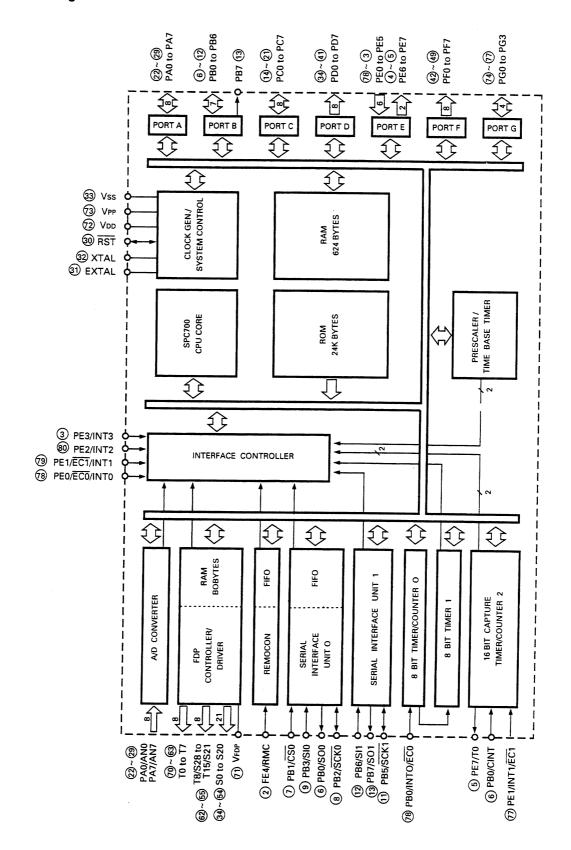
#### **CIRCUIT DESCRIPTION**

#### IC701: CXP82324 (CMOS 8bit 1-Chip Microcomputer)

#### 1. Pin Connection Diagram



#### 2. Block Diagram



# 3. Input and Output Terminal Functions

Pin No.	Symbol	Description			
79, 80, 1	STEP SEL	Input to select frequency band and step according to regions.			
		Region Frequency Step 79 80 1			
		Korea FM: 87.5~107.9 MHz 200 kHz L H H			
		AM: 522~1611 kHz 9 kHz			
		PT INDO FM: 87.5~ 108 MHz 50 kHz L L H			
		AM: 522~1611 kHz 9 kHz			
		520~ 1710 kHz   10 kHz			
		Europe FM: 87.5~108 MHz 50 kHz L L L			
		AM: 522~1611 kHz 9 kHz			
		153~ 279 kHz 9 kHz			
		USA/Canada FM: 87.5~ 107.9 MHz   200 kHz   L   H   L			
		AM: 520~ 1710 kHz   10 kHz			
2	RMC IN	Input for remote control signal (At "L", it is active)			
3	MODEL	Input to segment, and data output for key scan.			
4	ST-NJU9701	Chip enable output for NJM9701.			
5	ST-TC9176	Chip enable output for TC9176.			
6	DIGI-LINK	Output/Input for communication with other sets.			
7, 8	MODE	Output to select prologic mode.			
	CONTROL	Pin No. Normal Wide Phantom			
		7 H L L			
		8 L H L			
9	TEST TONE	Output is "H" when the test tone mode is being activated.			
10 10	MUTE	Output to select noise sequence in prologig mode.			
10~12	NOISE SEQUENCER	Output to select hoise sequence in prologing mode.			
13	NC	Not Used!			
14	CH. CONTROL	Output to select the channel mode in NJM2177.			
15, 16	VIDEO	Output to select the video signal in LA7952.			
.0, .0	CONTROL	Pin No.   VCR1   VCR2   VCD			
		15 H L L			
		16 L H H			
17	BY-PASS	Output to allow the audio signal to by-pass dolby decoder IC NJM2177.			
	CONTROL	At "L" the signal is by-passed.			
18	ST-LC7821	Chip enable output for LC7821.			
19~21	KEY INPUT	Data input for key scan.			
22	ST-BY	When power is on, control data output is "H".			
02/04	DAICK	When power is off, control data output is "L".  Data/Clock output for LC7821, NJM9701 and TC9176.			
23/24	DA/CK STEREO	Input to light "STEREO" indicator.(At "L", it is active)			
25 26	STEREO S/M	Input to detect RF level of station during tuning.			
27	VCD CHECK	Input to detect CDC ("H") or VCDC ("L").			
28	FM MODE	Output to select FM MONO or STEREO.			
1	, WI WIODE	At "H", FM MONO is selected and at "L", FM STEREO is selected.			
1		,			
29	T-MUTE	Output for tuner mute.(At "H", it is active)			
29 30	T-MUTE RST	Output for tuner mute.(At "H", it is active) Input to reset CPU.			

Pin No.	Symbol	Description	
32	XTAL	Output for crystal oscillator.	
33	Vss	Ground	
34	ST-L <b>M</b> 7001	Chip enable output for LM7001.	
35/36	DA/CK	Data/Clock output for LM7001.	
37~41	, NC	Not Used!	
42~49	SEGMENT	Segment signal output for FIP.	
50~54	SEGMENT/	Segment signal output for FIP and Data output for key scan.	
	KEY SCAN		
55~57	SEGMENT	Segment signal output for FIP.	
58	NC	Not Used!	
59~70	GRID	Grid signal output for FIP.	
71	Vfdp	Power supply for FIP controller.	
72	Vdd	+5V Power supply.	
73	NC	Not Used ! (Connected to Vdd)	
74~77	NC	Not Used!	
78	P/D	Input to detect power down.(At "H", it is active)	

#### **ALIGNMENT PROCEDURES**

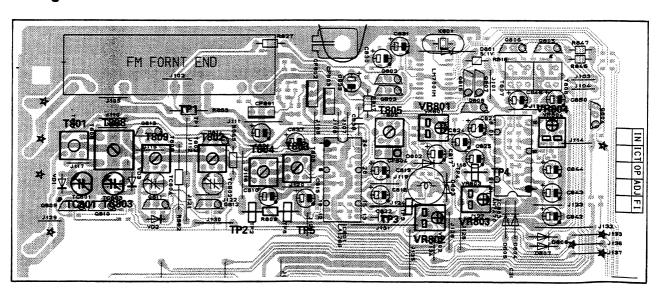
#### 1. Equipment Required

- AM Standard Signal Generator (AM SSG)
- Oscilloscope
- AC Voltmeter
- FM Standard Signal Generator (FM SSG)
- Stereo Modulator

- Audio Generator
- Distortion Meter
- DC Voltmeter
- Frequency Counter

Note: Disconnect external FM antenna prior to alignment.

## 2. Alignment and Test Points (PCB1)

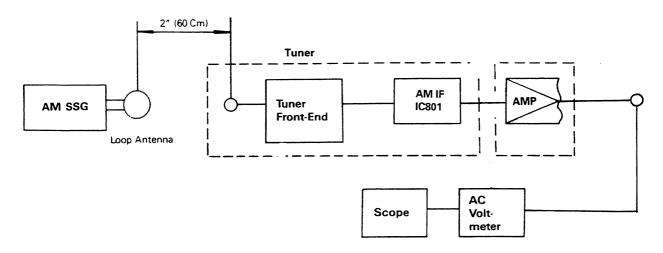


#### 3. AM IF and RF Alignment

Preparation

1. Output of Signal Generator should not be higher than necessary to obtain an optimum output reading.

Step	Signal Generator Frequency	Receiver Frequency on the Display	Equipment Connection	Adjustment point	Adjust for
	999 kHz	522 kHz	DC Voltmeter	T802	1.1 V reading
1	(400 Hz, Mod.)		TP1		
i	207 kHz	153 kHz	DC Voltmeter	T809	1.8 V reading
	(400 Hz, Mod.)		TP1		
	594 kHz	594 kHz	AC Voltmeter to	T801	Maximum
2	(400 Hz, Mod.)		speaker terminal	(ANT Coil)	reading
	1404 kHz	1404 kHz	AC Voltmeter to	T801	Maximum
3	(400 Hz, Mod.)		speaker terminal	(ANT Trimmer)	reading
	450 kHz	999 kHz	AC Voltmeter to	T805	Maximum
4	(400 Hz, Mod.)		speaker terminal	(IFT)	reading
5	999 kHz (400 Hz, Mod.)	999 kHz	DC Voltmeter TP3	VR801	FL display 'TUNED' Indication on receiver with AM SSG output level of 800μV/m 1.4V reading
6	162 kHz	162 kHz	speaker	T808	Maximum
6	(400 Hz, Mod.)		terminal		reading
	252 kHz	252 kHz	speaker	TC803	Maximum
7	(400 Hz, Mod.)		terminal		reading



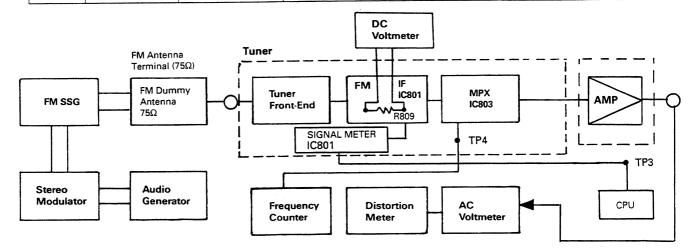
**AM Alignment Connection** 

#### 4. FM IF Alignment

Preparation

- 1. Signal Generator output should be no higher than necessary to obtain an optimum output reading.
- 2. Switch Press to FM.
- 3. Signal generator deviation: 40 kHz (D, PT Version) or 75kHz (A, KS Version)

Step	Signal Generator Frequency	Receiver Frequency on the Display	Equipment Connection	Adjustment point	Adjust for
	98.0 MHz	98.0 MHz	Distortion	T804	Maximum
1	(1 kHz, Mod.)		meter to		distortion
			speaker terminal		
	98.0 MHz	98.0 MHz	DC Voltmeter to	VR802	FL display 'TUNED'
	(1 kHz, Mod.)		TP3		Indication on
					receiver with FM
2					SSG output level of
					المبر 10
					1.3V reading
	98.0 MHz	98.0 MHz	DC Voltmeter to	T803	Zero reading on DC
3	(1 kHz, Mod.)		TP2 & TP5		voltmeter.



FM RF/IF and MPX Alignment Connection

## 5. MPX Alignment

Preparation

- 1. Switch: Press to FM.
- 2. Tuner for 98 MHz on band.
- 3. Signal Generator output level:1000 pV.
- 4. Deviation:40 kHz (D, PT Version) or 75kHz (A, KS Version) at 100% modulation of composite signal.
- 5. Connect Signal Generator to FM antenna terminal through FM dummy antenna (75  $\varrho$ ).

Step	19 kHz Modulation Level	Signal Generator Frequency Setting	Equipment Connection	Adjustment point	Adjust for
1	Pilot off	Carrier only	Frequency counter connect to TP4	VR803	76 kHz ± 50 Hz
2	8% Mod.	Composite to channel 1 kHz R	AC voltmeter to R channel speaker terminal	-	Setting 0dB reference
3	8% Mod.	Composite to channel 1 kHz L	AC voltmeter to R channel speaker terminal	VR804	AC voltmeter reading should be at least 40 dB below.
4	8% Mod.	Composite to channel 1 kHz R	AC voltmeter to R channel speaker terminal	VR804	Same as Step 3.

If you could not obtain -40 dB readings in Steps 3 and 4 (compared with Step 2), readjust VR804 until you obtain -40 dB readings for both Steps 3 and 4. Nominal is -45dB.

# **TROUBLESHOOTING**

Symptom	Cause and Remedy
Unit inoperative (FL indicator does not light)	<ul> <li>A) Filament resistor R723 or R722 is Blown.</li> <li>Replace the resistor.</li> <li>B) Check the CNT104 (Pin No. 1, 2, 3) and CNT701 (Pin No. 1, 2, 3).</li> </ul>
FM inoperative	A) Defective front-end. Replace. B) Defective FM switch. Replace the switch. C) PLL IC(LM7001) Malfunction. Replace the IC(LM7001). D) Defective coil T803 or T804. Replace the coil(s). E) Defective lead-in. Repair or replace the lead-in. F) Ceramic filter CF801, CF802 defective. Replace the defective ceramic filter(s). G) Defective controller circuit component. Replace.
Poor multiplex separation	<ul> <li>A) Improper adjustment. Readjust VR803 and VR804. (Refer to MPX Alignment.)</li> <li>B) IC803 defective. Replace.</li> <li>C) Variable resistor VR803 or VR804 defective. Replace the variable resistor(s).</li> </ul>
STEREO indicator does not light	A) Defective indicator in FL. Replace.  B) Improper adjustment of VR803 of tuner board. Make readjustment.  C) Defective IC803 Replace the defective component.
FM volume not sufficient	A) If volume from both L and R channels is not loud enough: Front - end section defective. Faulty C801, Coil T803. Defective C838 of tuner Board. If sound of one channel is not loud enough: Defective T806, T807
FM Mono has no effect	A) Defective FM MODE switch. Replace.

Symptom	Cause and Remedy
AM inoperative	<ul> <li>A) Damaged IC801 of tuner board. Replace.</li> <li>B) Defective T801, T802, T805 or CF804 of tuner board. Replace the defective component(s).</li> <li>C) Resistor R829, R822 defective. Replace the defective component(s).</li> <li>D) Capacitor C857, C818, C822 defective. Replace the defective capacitor(s).</li> <li>E) Defective AM switch. Replace.</li> <li>F) Defective varicap diode VD1, VD2. Replace Varicap diode(s).</li> <li>G) Damaged AM loop antenna. Repair or replace.</li> <li>H) Defective controller circuit component. Replace.</li> </ul>
Auto tune inoperative (UP/DOWN)	A) Poor contact in Up/Down key. Repair or replace. B) Defective IC701. Replace. C) Defective tuner circuit component. Replace. D) In case of FM only, improper adjustment of FM front-end. Readjust.
Manual tune inoperative(UP/DOWN) (AM or FM)	A) Poor contact in Up/Down key. Replace. B) Defective IC701. Replace.
Memory setting inoperative	A) Poor contact in memory set key. Replace. B) Defective IC701. Replace the defective component.
FL inoperative	A) FL defective. Replace. B) Defective IC701. Replace. C) Defective X701. Replace.
Remote Control Unit inoperative	A) Weak Battery. Replace. B) Defective. Replace. C) Defective IC701(CPU). Replace.

## **MECHANICAL PARTS LIST**

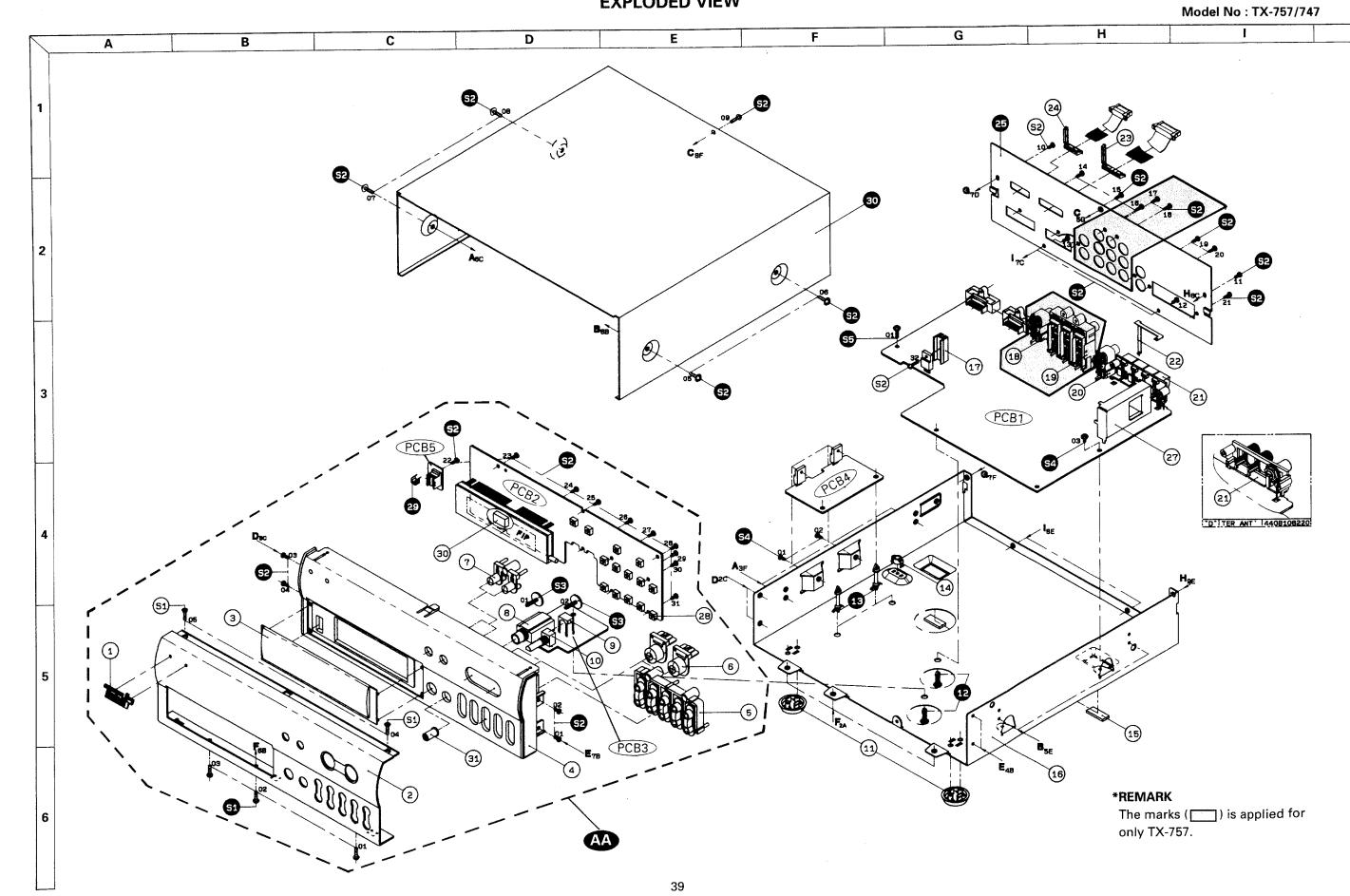
Model No.: TX-757

Model	No. :	TX-747
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Ref. No.	Description	Part No. 0	Q'ty	Version	Ref. No.	Description	Part No. Q'ty Version				
	PACKAGE					PACKAGE					
	Box Carton	049605258301	1	KS		Box Carton	04960525830	1	KS		
	Box Carton	049605258304		D.PT INDO.A		Box Carton	04960525830	1	D.PT INDO		
	Poly Bag		1	D.F 1 11100X		Poly Bag	9705001550	1	J		
		9722041410				Cushion Poly	9722041410	1			
	Cushion Poly	9715000120				Film Soft PE	9715000120	1			
	Film Soft PE	9/15000120	1			Firm Soft FE	57 13000120	'			
	ACCESSORIES					ACCESSORIES					
	Assembly Commander	541810127015	1	KS		Assembly Commander	41810126015	1	KS		
	Assembly Commander	541810127025		D,PT INDO,A		Assembly Commander	41810126025	1	D.PT INDO		
	Battery 1.5V AA(R6M)	5518001610		KS		Battery 1.5V AA(R6M)	5518001610	1	KS		
		4348000320		KS.PT INDO.A		FM Antenna Wire Dipole	4348000320	1	KS,PT INDO		
	FM Antenna Wire Dipole					FM Antenna Cord	4348001110	1	D D		
	FM Antenna Cord		1					1	KS.PT INDO		
	Cord RCA, 1P	4328206410		KS,PT INDO		Cord RCA, 1P	4328206410				
	Manual Instruction	9007018440		KS		Manual Instruction	9007018450	1	KS		
	Manual Instruction	9007018441	1	PT INDO		Manual Instruction	9007018452	1	PT INDO		
	Manual Instruction	9007018451	1	٥		Manual Instruction	9007018451	1	D		
	Manual Instruction	9007018443	1	A		Antenna AM Loop Stand Strip Wire	2608207361	1	KS.PT INDO		
	Antenna AM Loop Stand Strip Wire	2608207361	1	KS,PT INDO,A		Antenna AM Loop Stand Type	2608207360	1	D		
	Antenna AM Loop Stand Type	2608207360	1	D					•		
						CABINET & CHASSIS	0.405050.45.4				
	CABINET & CHASSIS				1	Badge, INKEL	04853504541	1			
1	Badge, INKEL	048535045411	1	KS	(1)	Badge, SHERWOOD	04853504542	1	A,D,PT INDO		
(1)	Badge, SHERWOOD	048535045421	1	A,D,PT INDO	2	Panel Front	04860202012	1	A,KS,PT INDO		
2	Panel Front	048602020111	1	KS	(2)	Panel Front	04860202014	1	D		
(2)	Panel Front	048602020131		A,D,PT INDO	3	Window Display	04855302351	1			
3	Window Display	048553023512	1		4	Body Front	04852100951	1			
4	Body Front	048521009511	1		5	Button Function	04854307001	1			
			1		6	Button Input, 1 key	04854513131	2			
5	Button Function	048543070012	•		7	Not Used!	0-00-010101	2			
6	Button Input, 1 key	048545131311					4420005555				
7	Button Mode, 2 key	048545131411	1		8	Jack Phone	4438005510	1			
8	Jack Phone	4438005510	1	KS,PT INDO	9	Shield Fence	6165146110	1			
(8)	Not Used !			A,D	10	Volume Mic	3208052410	1			
9	Shield Fence	6165146110	1	KS,PT INDO	11	Foot & Rubber	6035104310	2			
(9)	Not Used !			A.D	12	Fastener, 12H	6528301710	2			
10(VR401)		3208052410	1	KS.PT INDO	13	Fastener, 19H	6528300210	2			
(10)	Not Used !	020002		A.D	14	Spacer PCB	6705004220	1			
11	Foot & Rubber	6035104310	2	~5	15	Cushion Foot	6715021230	2			
					16	Chassis Main	6121614930	1			
12	Fastener, 12H	6528301710									
(12)	Fastener, 12H			A,D	17	Heatsink Regulator TR	7505206210	1	A.KS,PT INDO		
13	Fastener, 19H	6528300210	2		(17)	Not Used!			D		
14	Spacer PCB	6705004220	1		18	Not Used!					
15	Cushion Foot	6715021230	2		19	Not Used !					
16	Chassis Main	6121614930	1		20	Jack RCA, 2P	4438103010	1			
17	Heatsink Regulator TR.	7505206210	1		21	Terminal Antenna, 4P	4408107120	1	A,KS,PT INDO		
18	Jack RCA, 2P	4438103020	1		(21)	Terminal Antenna, 4P	4408108220	1	D		
19	Jack RCA, 9P	4438114510	1		22	Shield Plate	6165151910	1	A,KS,PT INDO		
20	Jack RCA, 2P	4438103010	1		(22)	Not Used !			D		
					23	Stapper Connector	6518002210	1	•		
21	Terminal Antenna, 4P	4408107120		A,KS,PT INDO	24	Stopper Connector	6518002110	1			
(21)	Terminal Antenna, 4P	4408108220		D	25	Chassis Back	046102045311	1	KS,PT INDO		
22	Shield Plate	6165151910	1	A,KS,PT INDO							
(22)	Not Used!			D	(25)	Chassis Back	046102045391	1	A		
23	Stopper Connector	6518002210	1		(25)	Chassis Back	046102045351	1	D		
24	Stopper Connector	6518002110	1		26	Cover Top	046123018011				
25	Chassis Back	046102045411	1	KS	27	Shield Fence, Front-end	6163115510	1	A,KS,PT INDO		
(25)	Chassis Back	046102045491	1	PT INDO	(27)	Not Used !			D		
(25)	Chassis Back	046102045421	1	A	28	Switch Tact	4658003710	11			
(25)	Chassis Back	046102045451	1		29	Switch Tact	4658004010	1			
26	Cover Top	046123018011	1	•	30	Sponge Rubber	6715012010	1			
27	Shield Fence, Front-end			A.KS.PT INDO	31	Knob Rotary	048545131511		A,KS,PT INDO		
(27)	•	0103113310	1		(31)	Not Used!		•	D		
	Not Used !	40500000		D	()				_		
28	Switch Tact	4658003710	14			HARDWARE KIT					
29	Switch Tact	4658004010	1		<b>C</b> 4		04000000	_			
30	Sponge Rubber	6715012010			S1	Screw, #2FTC 3x8B	8129230083				
31	Knob Rotary	048545131511	1	KS,PT INDO	S2	Screw, #BBTT 3x8B	8179130083				
(31)	Not Used !			A.D	(S2)	Screw, #BBTT 3x8B	8179130083				
					S3	Screw, Mecha	8155001210	2	A,KS,PT INDO		
	HARDWARE KIT				(S3)	Not Used!			D		
S1	Screw, #2FTC 3x8B	8129230083	5		S4	Screw, #BWPTT 3x6Y	8179230061	3			
S2	Screw, #BBTT 3x8B	8179130083		KS PT INDO	S5	Screw, #2WPTC 3x14Y	8159230141				
(S2)	Screw #BBTT 3x8B	8179130083				• • •		٠			
S3	Screw, Mecha	8155001210				MISCELLANEOUS					
(S3)	Not Used !	0133001210	4			Card Cable, 20P, 200mm	4118620205				
(S3) S4		04700000	_	A,D		Connector, System, 13P, 500mm					
	Screw, #BWPTT 3x6Y	8179230061					4358613501				
S5	Screw, #2WPTC 3x14Y	8159230141	1		8004	Connector, System, 9P, 500mm	4358609501				
					PCB1	P.C.Board Main	4004001500				
	MISCELLANEOUS				PCB2	P.C.Board Mic (KS, PT INDO AREA ONLY)	4004001530				
	Card Cable, 13P, 140mm	4118613145	1		PCB3	P.C.Board Power	4005512700				
	Card Cable, 20P, 200mm	4118620205			PCB4	P.C.Board Front	4004001510				
	Connector, System, 13P, 500mm	4358613501	1		PCB5	P.C.Board RMC	4004001520				
	Connector, System, 9P, 500mm	4358609501	1								
PCB1	P.C.Board Main		1			200000000000000000000000000000000000000					
PCB2		4004001500			I	PRODUCT SAFETY	NOTICE				
PCB3	P.C.Board Mic (KS, PT INDO AREA ONLY)		1		1						
PCB4	P.C.Board Power P.C.Board Front	4005512700	1		Fac	h precaution in this manual should be	followed during	00	convicing		
PCB5	P.C.Board RMC	4004001510			Con	nponents identified with the IEC symb	al 1 is the	9	list are of		
		4004001520				riponents identified with the IEC symp	in the pa	ıtS	nst are or		

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol. It in the parts list are of special significance to safety. When replacing a component identified with T., use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

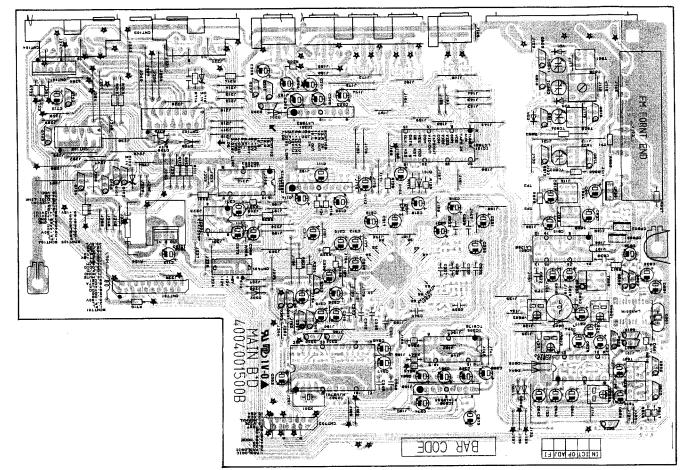
# **EXPLODED VIEW**



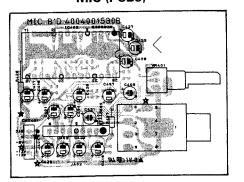
## PRINTED CIRCUIT BOARDS

Model No : TX-757/747

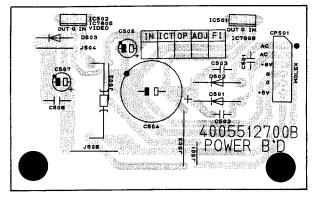




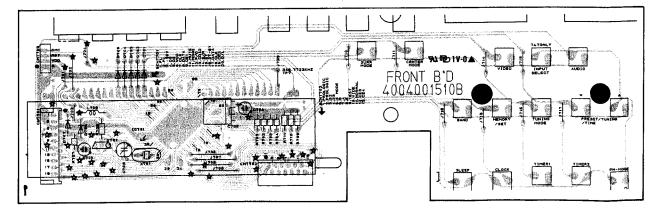
MIC (PCB3)



POWER (PCB4)



FRONT (PCB2)



RMC (PCB5)



## **ELECTRICAL PARTS LIST**

**PRODUCT SAFETY NOTICE** : Products marked with  $\triangle$  have special characteristics important to safety. If you replace any of these components, read carefully the product safety notice in this manual. Don't degrade the safety of the product through improper servicing. Positor/Capacitor tolerance – D:  $(\pm 0.5\%)$ , J:  $(\pm 5\%)$ , K:  $(\pm 10\%)$ , M:  $(\pm 20\%)$ , Z:  $\pm 80$ ,  $\pm 20\%$ 

PRODUCT SAFETY NOTICE	E : Products marked with 🕰 have special	characteristics important to safety.	mal	CONNECTORS	400400400704 4	(R121) Not Used!	D,A
	If you replace any of these component	s, read carefully the product safety notice in this man	ida.	CNT101 Lead Ass'y, 6P, 160mm	436106163761 1	R122 Chip	4.7 kohm 1/10 W J 3099472870 1 KS,PT INDO
	Don't degrade the safety of the produc	et through improper servicing.		CNT102 Wafer, 13P	4428525340 1	(R122) Chip	0 ohm 1/10 W J 3099000870 1 D,A
	Begister/Capacitor tolerance - D: (+0	5%), $J: (\pm 5\%)$ , $K: (\pm 10\%)$ , $M: (\pm 20\%)$ , $Z: +80$ , $-20$	%)	CNT103 Wafer, 13P	4428513820 1	R123 Chip	2.2 kohm 1/10 W J 3099222870 1 KS,PT INDO
	hesistor/capacitor tolerance B: (±0)	5/5// 5 - ( / - / - / - / - / - / - / - / - /		CNT104 Wafer, 15P	4428515820 1	(R123) Chip	1 kohm 1/10 W J 3099102870 1 D,A
	•			CNT105 Wafer, 9P	4428525300 1 4428531105 1 KS.PT INDO	D404 Chin	2.4 kohm 1/10 W J 3099242870 1 KS,PT INDO
				CNT401 Wire Trap, 5P		(R124) Not Used!	D,A
as 1 181. TV 757				(CNT401) Not Used !	. D,A	R125/R126 Metal Film	100 ohm 1/5 W J 3029101970 2
Model No. : TX-757				CNT701 Wafer, FPC, 20P	4426001020 1	R127 Chip	47 kohm 1/10 W J 3099473870 1
				CNT702 Wafer, FPC, 13P	4426001013 1	R128 Chip	3.3 kohm 1/10 W J 3099332870 1
Ref. No. Description	Part No. Q'ty Versio	n Ref. No. Description	Part No. Q'ty Version			R129 Metal Film	22 ohm 1 W J 3029220470 1
		C368 Chip, CH 680 pF 50 V J	3539681210 1	DIODES		R130 Carbon Film	10 kohm 1/5 W J 3069103970 1
PCB1 ASSEMBLY P.C.BOAF	RD MAIN	C369 Electrolytic SG 47 uF 16 V M	3479347031 1	D101 1N4148, Switching	2058322101 1	R201 Chip	22 ohm 1/10 W J 3099220870 1
CAPACITORS		C370 Chip, CH 100 pF 50 V J	3539101210 1	D102 Zener, UZ 5.1 BSB	2258599103 1	R202-R204 Chip	68 ohm 1/10 W J 3099680870 3
C100/C101 Chip	0.1 uF 50 V Z 3539104060 2	C371 Electrolytic SG 1 uF 50 V M	3479310971 1	D201 1N4148, Switching	2058322101 1	R205 Metal Film	68 ohm 1/5 W J 3029680970 1
C102 Chip, CH	100 pF 50 V J 3539101210 1	C372 Electrolytic SG 47 uF 16 V M	3479347031 1	D301/D302 1N4148, Switching	<b>2058322101</b> 2	R206 Chip	47 kohm 1/10 W J 3099473870 1
C103 Chip	0.047 uF 50 V Z 3539473060 1	C373 Electrolytic SG 4.7 uF 50 V M	3479347971 1	D708 1N4148, Switching	2058322101 1	R207 Chip	68 ohm 1/10 W J 3099680870 1
C104 Electrolytic SG	1 uF 50 V M 3479310971 1	C374 Electrolytic SG 0.47 uF 50 V M	3479347871 1	D709/D710 Zener, UZ 5.1 BSB	2258599103 2	R208 Chip	47 kohm 1/10 W J 3099473870 1
C105 Chip	0.047 uF 50 V Z 3539473060 1	C744 Chin CH 470 pF 50 V J	3539471210 1	D801 Zener, UZ 5.1 BSB	2258599103 1	R209/R210 Chip	390 ohm 1/10 W J 3099391870 2
C107 Chip, CH	220 pF 50 V J 3539221210 1 KS,PT II	C712 Electrolytic SG 1 uF 50 V M	3479310971 1	D802-D805 1N4148, Switching	2058322101 4	R211 Chip	3.3 kohm 1/10 W J 3099332870 1
(C107) Not Used!	D,A	C801 Electrolytic SG 100 uF 16 V M	3479310131 1	D806/D807 1N4148, Switching	2058322101 2 D	P212/P213 Metal Film	1 kohm 1/5 W J 3029102970 2
C108 Electrolytic SG	10 uF 35 V M 3479310061 1	0001 Chin 0.047 UF 50 V Z	3539473060 1	(D806/D807 Not Used !	KS,PT INDO	R301 Chip	6.8 kohm 1/10 W J 3099682870 1
C110 Chip, CH	220 pF 50 V J 3539221210 1 KS,PT I	C803 Chip, CH 33 pF 50 V J	3539330210 1	VD1/VD2 Varactor, SVC321SPA-C	2258817104 2	R302 Chip	47 kohm 1/10 W J 3099473870 1
(C110) Not Used!	D,A	C804 Chip 0.01 uF 50 V K	3539103820 1	VD3 Varactor, SVC321SPA-C	2258817104 1 D	P303 Chin	15 kohm 1/10 W J 3099153870 1
C111/C112 Electrolytic SG	47 uF 16 V M 3479347031 2	C805 Chip, CH 33 pF 50 V J	3539330210 1	(VD3) Not Used !	KS,PT IND	R304 Chip	2.2 Mohm 1/10 W J 3099225870 1
C113 Electrolytic SG	4.7 uF 50 V M 3479347971 1	C806-C809 Chip 0.047 uF 50 V Z	3539473060 4	, ,		R305 Chip	47 kohm 1/10 W J 3099473870 1
C114 Electrolytic SG	10 uF 35 V M 3479310061 1	C810 Electrolytic SG 47 uF 16 V M	3479347031 1	INTEGRATED CIRCUITS		R306 Carbon Film	47 kohm 1/5 W J 3069473970 1
C115-C128 Chip CH	100 pF 50 V J 3539101210 14 D	0014 C012 Chin CH 100 pF 50 V J	3539101210 3	IC101 LC7821	2168017132 1	R307-R309 Chip	100 kohm 1/10 W J 3099104870 3
(C115-C128 Not Used !	KS,PT1	NDO,A C814 Chip, CH 330 pF 50 V J	3539331210 1	IC102 KIA4559S/KIA75559S	2168206103 1	R311 Chip	27 ohm 1/10 W J 3099270870 1
C201-C203 Electrolytic SG	10 uF 35 V M 3479310061 3	C815 Electrolytic SG 1 uF 50 V M	3479310971 1	IC103 KIA7806PI, Regulator	2168606110 1	R314 Chip	100 kohm 1/10 W J 3099104870 1
C204/C205 Electrolytic SG	470 uF 10 V M 3479347121 2	C816 Chip 0.047 uF 50 V Z		IC201 LA7952, Video Switch	2168317136 1	R315 Chip	15 kohm 1/10 W J 3099153870 1
C206 Electrolytic SG	100 uF 16 V M 3479310131 1	C817 Electrolytic SG 10 uF 35 V M		IC301 NJM2177AFB3	2169020000 1 2469030117 1	R316/R317 Chip	8.2 kohm 1/10 W J 3099822870 2
C207 Chip	0.047 uF 50 V Z 3539473060 1	C818 Electrolytic SG 3.3 uF 50 V M		IC302 NJU9701	2168020117 1	R318 Chip	6.8 kohm 1/10 W J 3099682870 1
C301 Mylar	0.047 uF 100 V J 3679473120 1	C819 Electrolytic SG 2.2 uF 50 V M		IC303 GD4053B	2138001117 1	R319 Chip	330 kohm 1/10 W J 3099334870 1
C302/C303 Mylar	0.1 uF 63 V K 3679104297 2	C820 Chip 0.022 uF 50 V K		IC304 KIA4559P/KIA75559P	2168206104 1	R320 Chip	6.8 kohm 1/10 W J 3099682870 1
C304 Chip, CH	680 pF 50 V J 3539681210 1	C821 Chip 0.047 uF 50 V Z		IC305 TC9176P	2138007124 1	R321 Chip	47 kohm 1/10 W J 3099473870 1
C305 Mylar	0.047 uF 100 V J 3679473120 1	C822 Mylar 0.047 uF 100 V J		IC306 KIA4559S/KIA75559S	2168206103 1	R322 Chip	15 kohm 1/10 W J 3099153870 1
C306 Electrolytic SG	22 uF 16 V M 3479322031 1	C823 Chip, CH 470 pF 50 V J		IC801 LA1266	2168017128 1 2138017136 1	R323/R324 Metal Film	1 kohm 1/5 W J 3029102970 2
C307-C309 Electrolytic SG	10 uF 35 V M 3479310061 3	C824 Electrolytic SG 3.3 uF 50 V M		IC802 LM7001M	2168410101 1	R325 Metal Film	1.5 kohm 1/5 W J 3029152970 1
C310 Electrolytic SG	22 uF 16 V M 3479322031 1	C825 Electrolytic SG 1 uF 50 V M		IC803 AN7470	2188410101	R326 Chip	1.5 kohm 1/10 W J 3099152870 1
C311 Chip	0.000	C826 Chip 0.047 uF 50 V Z				R327/R328 Carbon Film	33 kohm 1/5 W J 3069333970 2
C312 Electrolytic SG	0.47	C827 Electrolytic SG 0.22 uF 50 V M		TRANSISTORS	2208622106 1	R329 Carbon Film	180 kohm 1/5 W J 3069184970 1 15 kohm 1/10 W J 3099153870 1
C313/C314 Electrolytic SG	2 17000074	C828/C829 Chip 0.01 uF 50 V K		Q101 DTC114YS	2238006103	R330 Chip	Te memma and a second
C315 Electrolytic SG	0.22	C830 Electrolytic SG 4.7 uF 50 V M		Q102 KRA107M/DTA114YS	2228106104 1	R331 Metal Film	
C316 Electrolytic SG	10 00 00 00 00 00	C831 Electrolytic SG 47 uF 16 V M		Q103 KTA1273/KTA966A, PNP	2208610109 1	R332 Chip	G.E. 115-11-11-11-11-11-11-11-11-11-11-11-11-
C317 Electrolytic SG	220 uF 16 V M 34/9322131 1 4.7 uF 50 V M 3479347971 1	C832 Chip 0.047 uF 50 V Z		Q104 BKTC3199Y, NPN	2208610109 2	R333 Chip	
C318 Electrolytic SG	4.7 uF 50 V M 3479347971 1	C833 Electrolytic SG 47 uF 16 V M		Q201/Q202 BKTC3199Y, NPN	2208622108 1	R334 Chip	
C319 Electrolytic SG	0,006 uF 50 V K 3539562820 1	C834/C835 Chip 0.047 uF 50 V Z		Q203 DTC114T\$ Q301/Q302 DTC323T\$, NPN	2238422100 2	R335 Chip	5.6 kohm 1/10 W J 3099562870 1 22 ohm 1/10 W J 3099220870 2
C320 Chip	220 uF 10 V M 3479322121 1	C837 Electrolytic SG 10 uF 35 V M		Q303-Q305 KRA107M/DTA114YS	2238006103 3	R336/R337 Chip	15 kohm 1/10 W J 3099153870 1
C321 Electrolytic SG	0.047 uF 100 V J 3679473120 1	Coso Chip		Q306/Q307 DTC114TS	2208622108 2	R338 Chip	18 kohm 1/10 W J 3099183870 1
C322 Mylar	470 pF 50 V J 3539471210 1	C839 Ceramorubular		Q702/Q703 DTC114TS	2208622108 2	R339 Chip R340 Chip	15 kohm 1/10 W J 3099153870 1
C323 Chip, CH	0.005 uF 50 V J 3539472820 1	C040 Crip		O801 Chip, KTC3880	2207606002 1	R340 Chip R341 Chip	22 ohm 1/10 W J 3099220870 1
C324 Chip C325 Chip	0.006 uF 50 V K 3539562820 1	(84) Chip, Cri		Q802/Q803 BKTC3199Y, NPN	2208610109 2	R341 Chip	1 Mohm 1/10 W J 3099105870 1
	0.68 uF 63 V K 3679684297 1	C042 Electronylle		Q804 KRA107M/DTA114YS	2238006103 1	R343/R344 Chip	1 kohm 1/10 W J 3099102870 2
C326 Mylar C327-C329 Mylar	0.22 uF 63 V K 3679224297 3	CO43 Electrolytic GO		Q805/Q806 BKTC3199Y, NPN	2208610109 2	R345 Chip	4.7 kohm 1/10 W J 3099472870 1
C330/C331 Electrolytic SG	4.7 uF 50 V M 3479347971 2	C844 Electrolytic GG		Q807/Q808 KRA107M/DTA114YS	2238006103 2	R346/R347 Metal Film	1 kohm 1/5 W J 3029102970 2
C332 Mylar	0.22 uF 63 V K 3679224297 1	C845 Chip		Q809-Q814 BKTC3199Y, NPN	2208610109 6 D	R348 Metal Film	4.7 kohm 1/5 W J 3029472970 1
C333-C336 Chip	0.1 uF 50 V Z 3539104060 4	C040 CTIP	3539102820 1 D,PT INDO	(Q809-Q81 Not Used !	KS,PT IND		100 kohm 1/10 W J 3099104870 1
C337/C338 Chip	0.022 uF 50 V K 3539223820 2	(6040) 6110	3539152820 1 KS,A	Q815 KRA107M/DTA114YS	2238006103 1 D	R350 Chip	1.8 kohm 1/10 W J 3099182870 1
C339/C340 Mylar	0.1 uF 63 V K 3679104297 2	004 NE 50V K		(Q815) Not Used !	KS,PT IND	O,A R351 Chip	8.2 kohm 1/10 W J 3099822870 1
C341 Chip, CH	680 pF 50 V J 3539681210 1		3479322971 1	•		R352 Chip	100 kohm 1/10 W J 3099104870 1
C342 Chip	0.006 uF 50 V K 3539562820 1		3539222820 1	RESISTORS		R353 Chip	1.8 kohm 1/10 W J 3099182870 1
C343 Electrolytic SG	1 uF 50 V M 3479310971 1	C850 Electrolytic SG 2.2 uF 50 V M		R101-R106 Chip	1 kohm 1/10 W J 3099102870 6	R354 Chip	8.2 kohm 1/10 W J 3099822870 1
C344 Chip	0.006 uF 50 V K 3539562820 1	C851 Chip 0.002 uF 50 V K	3539222820 1	R107 Chip	5.6 kohm 1/10 W J 3099562870 1 KS,PT IND	R355/R356 Chip	330 ohm 1/10 W J 3099331870 2
C345 Chip, CH	470 pF 50 V J 3539471210 1	C852 Chip CH 15 pF 50 V J	3539150210 1	(R107) Chip	3.3 kohm 1/10 W J 3099332870 1 D,A	R358 Chip	100 kohm 1/10 W J 3099104870 1
C346 Chip	0.1 uF 50 V Z 3539104060 1	C853 Chip 0.047 uF 50 V Z	3539473060 1 D	R108 Chip	5.6 kohm 1/10 W J 3099562870 1 KS,PTIND	R359 Chip	10 kohm 1/10 W J 3099103870 1
C347 Electrolytic SG	47 uF 16 V M 3479347031 1	(C853) Not Used !	KS,PT INDO,A	(R108) Not Used!	D,A	R712 Chip	22 kohm 1/10 W J 3099223870 1
C348/C349 Mylar	0.047 uF 100 V J 3679473120 2	C854 Chip 0.047 uF 50 V Z	3539473060 1 D	R109 Chip	5.6 kohm 1/10 W J 3099562870 1 KS.PT IND	R713 Carbon Film	220 kohm 1/5 W J 3069224970 1
C350 Chip	0.1 uF 50 V Z 3539104060 1 0.003 uF 50 V K 3539332820 1	(C854) Not Used !	KS,PT INDO,A	(R109) Chip	3.3 kohm 1/10 W J 3099332870 1 D.A	R714 Carbon Film	100 kohm 1/5 W J 3069104970 1
C351 Chip	0.000	C855 Chip, CH 180 pF 50 V 3	3539181210 1 D	R110 Chip	5.6 kohm 1/10 W J 3099562870 1 KS,PT IND D.A	R715 Chip	4.7 kghm 1/10 W J 3099472870 1
C352 Chip, CH	7,000,000,000,000,000,000,000,000,000,0	(C855) Not Used !	KS,PT INDO,A	(R110) Not Used!	1 kohm 1/5 W J 3029102970 3	R716 Carbon Film	5.6 kohm 1/5 W J 3069562970 1
C353 Electrolytic SG	220	C856 Chip CH 33 pF 50 V J	3539330210 1 D	R111-R113 Metal Film	100 kohm 1/5 W J 3069104970 1	R717/R718 Chip	5.6 kohm 1/10 W J 3099562870 2
C354 Chip	2500071010 3	(C856) Not Used !	KS,PT INDO,A	R114 Carbon Film	51 kohm 1/10 W J 3099513870 1	R719-R721 Chip	1 kohm 1/10 W J 3099102870 3
C355/C356 Chip, CH	2,0	Cost Citip, Cit	3539471210 1	R115 Chip	4.7 kohm 1/5 W J 3029472970 1 KS.PTING	R722/R723 Metal Film	3.3 ohm 1/5 W J 3029339970 2
C357/C358 Chip, CH	0.000,000,000,000,000,000,000,000,000,0	Cadarcada Criip, Cri	3539101210 2 D	R116 Metal Film	4.7 KONIN 175 VV 5 5025472575 1 KG, 1 KG	11001	100 ohm 1/10 W J 3099101870 1
C359 Electrolytic SG	4.7 uF 50 V M 34/934/9/1 1 0.1 uF 50 V Z 3539104060 1	(C858/C859 Not Used !	KS,PT INDO,A	(R116) Not Used!	4.7 kohm 1/10 W J 3099472870 1 KS,PT INC	R802 Chip	1 kohm 1/10 W J 3099102870 1 560 ohm 1/10 W J 3099561870 1
C360 Chip	47 UF 16 V M 3479347031 1		- 1	R117 Chip	0 ohm 1/10 W J 3099000870 1 D,A	11000 011p	
C361 Electrolytic SG	100 pF 50 V J 3539101210 1	FILTERS	3978011001 2 KS,A	(R117) Chip	2.2 kohm 1/10 W J 3099222870 1 KS,PT INC	R804 Chip	3.3 kohm 1/10 W J 3099332570 1 330 ohm 1/10 W J 3099331870 1
C362 Chip, CH	680 pF 50 V J 3539681210 1	CF801/802 SFE 10.7MA8-A	3978011001 2 KS,A 3978011011 2 D,PTINDO	R118 Chip (R118) Chip	1 kohm 1/10 W J 3099102870 1 D.A	11005 OTH	470 ohm 1/10 W J 3099471870 1 KS.D.A
C363 Chip, CH	0.47 uF 50 V M 3479347871 1	(CF801/802 SFE 10.7MS3G	3908001080 1	R119 Chip	2.4 kohm 1/10 W J 3099242870 1 KS,PT INC	R806 Chip	330 ohm 1/10 W J 3099331870 1 PTINDO
C364 Electrolytic SG	0.1 uF 50 V Z 3539104060 1	CF804 CFM2-450BL	3300001000	(R119) Not Used!	D.A	~ (R806) Chip R807 Chip	10 kohm 1/10 W J 3099103870 1
C365 Chip C366 Electrolytic SG	47 uF 16 V M 3479347031 1			R120 Chip	51 kohm 1/10 W J 3099513870 1	R807 Chip	3.3 kohm 1/10 W J 3099332870 1
- · · · · · · · · · · · · · · · · · · ·	100 pF 50 V J 3539101210 1					Acco Chip	6.0 Refin (10 44 0 000-2 )
C367 Chip, CH	100 1. 01		V.				

CONNECTORS

Part No. Q'ty Version

4.7 kohm 1/5 W J 3029472970 1 KS,PT INDO

Description

Metal Film

R121

Part No. Q'ty Version

Mα	del	No.	: 1	ГΧ.	-757

	ei 140 T.X-737		Part Ma	Oltu Varais:-	Ref. No.	Description	Part No. Q'	tv Version	Ref. No.	Description		Part No. Q'ty Ver	rsion Ref. No.	Description		Part No. Q'ty Version
Ref. No		18 kohm 1/5 W J		Q'ty Version	VR803	5 kohm (B)	3248050243			RESISTORS			R707	Carbon Film	10 kohm 1/5 W J	3069103970 1
R809	Carbon Film	18 KONM 1/5 W J 47 kohm 1/5 W J			VR804	200 kohm	3248020443		R401	Chip	0 ohm 1/10 W J	3099000870 1	R708	Chip	10 kohm 1/10 W J	3099103870 1
(R809)	Carbon Film	22 ohm 1/10 W J				=== ·· <del>····</del> ····			R402	Chip	4.7 kohm 1/10 W J		R709-R71	1 Carbon Film	100 kohm 1/5 W J	3069104970 3
R810 R811	Chip Chip	2.4 kohm 1/10 W J				MISCELLANEOUS			R403	Chip	1 kohm 1/10 W J					
R812	Chip	10 kohm 1/10 W J			X301	Resonator, CSA2.00MG-TF21	3938124001		R404	Chip	100 kohm 1/10 W J			MISCELLANEOUS		0070044004
R813	Chip	68 kohm 1/10 W J			X801	Crystal, 7.2MHz	3978101031		R405	Chip	10 kohm 1/10 W J		X701	Crystal, 10MHz		3978011001 1
R814	Chip	4.7 kohm 1/10 W J	3099472870	1	TC801	Trimmer, 10P	3838001140		R406	Chip	15 kohm 1/10 W J 8.2 kohm 1/10 W J		FL701 28	FL Display, CM1361C Switch Tact		2328002306 1 4658003710 14
R815	Chip	33 ohm 1/10 W J			TC803	Trimmer, 10P	3838001140		R407	Chip Chip	12 kohm 1/10 W J		20	Switch ract		4030003/10 14
R816	Metal Film	240 ohm 1/5 W J			(TC803)	Not Used!	7505006010	KS,PT INDO,A	R408 R409	Chip	3.3 kohm 1/10 W J					
R817	Metal Film	330 ohm 1/5 W J			17	Heatsink Regulator TR.	7505206210 4438103020		R410	Chip	12 kohm 1/10 W J		PCB5	ASSEMBLY P.C.BOARD	RMC	
R818	Chip	2 kohm 1/10 W J			18	Jack RCA, 2P Jack RCA, 9P	4438114510		R411	Chip	15 kohm 1/10 W J		29	Switch Tact		4658004010 1
(R818)	•	3.9 kohm 1/10 W J		1 D,PT INDO	19 20	Jack RCA, 9P Jack RCA, 2P	4438103010		R412	Chip	10 kohm 1/10 W J		C701	CAP, Electrolytic SG	10 uF 35 V	3479310061 1
R819	Chip	2.2 kohm 1/10 W J 22 kohm 1/10 W J		1 KS,PTINDO,A		Terminal Antenna, 4P		1 A,KS,PTINDO		Chip	15 kohm 1/10 W J	3099153870 1	CNT703	Connector, Wire Trap, 5P		4428531104 1
R820 (R820)	Chip Chip	12 kohm 1/10 W J			(21)	Terminal Antenna, 4P	4408108220	1 D	R414	Chip	6.8 kohm 1/10 W J		IC702	TFMT4380, Remote Sens	or	2408005001 1
R821	Chip	68 ohm 1/10 W J			22	Shield Plate	6165151910	1 A,KS,PT INDO		Chip	68 kohm 1/10 W J					
R822	Chip	100 kohm 1/10 W J		1 .	(22)	Not Used!		D	R416	Chip	6.8 kohm 1/10 W J					
R823	Chip	47 kohm 1/10 W J	3099473870	1	27	Shield Fence, Front-end	6163115510	1 A,KS,PT INDO		Chip	68 kohm 1/10 W J 27 kohm 1/10 W J					
R824	Chip	1 kohm 1/10 W J			(27)	Not Used!	3928101850	1 0	R418 R419	Chip	560 ohm 1/10 W J					
R825	Chip	560 ohm 1/10 W J				Front -End, FTH4-460V	054002009835			Chip Chip	15 kohm 1/10 W J			•		
R826	Chip	10 kohm 1/10 W J			C81	N ASSEMBLY P.C.BOARD FRONT END CAP. CeramicTubular. 8.2 pF 50	0 V K 3511825235	1	R421/R422	,	330 ohm 1/10 W J					
R827	Carbon Film	5.6 kohm 1/5 W J			C83		0 V J 3519101935	1	R423	Chip	1 kohm 1/10 W J					
	R829 Chip	100 ohm 1/10 W J 47 kohm 1/10 W J			C84		0 V Z 3519102935	1	R424	Chip	100 kohm 1/10 W J	3099104870 1				
R831	Chip Chip	33 kohm 1/10 W 3		1 D,PT INDO	C85	CAP, CeramicTubular, 3.9 pF 50	0 V K 3511395235	1	R425	Chip	47 kohm 1/10 W J					
(R831) R832	Chip	22 kohm 1/10 W			C86	CAP, CeramicTubular, 5.6 pF 50	0 V K 3511565235	1	R426	Metal Film	10 ohm 1/5 W J					
(R832)	•	27 kohm 1/10 W			C87		0 V K 3511225235	1	R427	Carbon Film	15 kohm 1/5 W J	3069153970 1				
R833	Chip	22 kohm 1/10 W			C88		0 V J 3511186135	1								
(R833)		27 kohm 1/10 W .			C89	0.0.0	0 V Z 3519102935	1	•	MISCELLANEOUS		4438005510 1				
R834	Chip	8.2 kohm 1/10 W L			C90		0 V K 3511825235 0 V K 3511335235		8 9	Jack Phone		6165146110 1				
(R834)		5.6 kohm 1/10 W		1 D.PT INDO	C91		0 V J 3511335235	1	-	Shield Fence Volume Mic, 10 kohm		3208052410 1				
R835	Chip	10 kohm 1/10 W			C92 L81	CAP, CeramicTubular 15 pF 50 Coil, Inductor, 0.47 uH	2648647882	1	10(VK401)	VOIGHTE HIRE, TO KOHIT		·=				
R836	Chip	8.2 kohm 1/10 W .		1 KS,A 1 D,PTINDO	L81	Coil, Inductor, 3.47 dH	2648622982	1								
(R836)	•	5.6 kohm 1/10 W . 1 kohm 1/10 W .			Q81	TR, KSC2786R	2208406128		PCB3	ASSEMBLY P.C.BOARD	D POWER	dadayyyyyyyy				
R837	Chip 2839 Chin	56 kohm 1/10 W			Q82/Q83	TR, KTC3193-0, NPN	2208406125		C501-C503	Mr. Coloregue and the control of the second of the	0.047 uF 100 V J					
	R839 Chip R842 Chip	3.3 kohm 1/10 W			Q84	FET, 2SK544	2218217000		C504	Electrolytic SD		3409347248 1				
R843		10 kohm 1/10 W			R81	RES, Carbon Film 100 kohm 1/5	W J 3069104970		C505	Electrolytic SG		3479310971 1				
(R843	•	3.3 kohm 1/10 W		1 DONI TO,C 1	R82/R83	RES, Carbon Film 33 kohm 1/5		2	C506	Ceramic Tubular	0.022 uF 25 V Z	3579223530 1 KS				
R844	Chip	3.3 kohm 1/10 W .	3099332870		R84	RES, Metal Film 220 ohm 1/5		1	(C506)	Not Used !	4 501/11	D,A 2470310071 1 kg				
R845	Chip	10 kohm 1/10 W .			R85	RES, Carbon Film 330 kohm 1/5			C507	Electrolytic SG	1 UF 50 V M	3479310971 1 KS, D,A				
(R845		3.3 kohm 1/10 W .		1 D,PT INDO	R86/R87	RES, Metal Film 390 ohm 1/5 RES, Carbon Film 560 kohm 1/5			(C507)	Not Used ! 2 1N4003, Rectifier		2058512108 2	,			
	R847 Metal Film	3.9 kohm 1/5 W .			R88 R89				D501/D502	1N4148, Switching		2058322101 1 KS	PT INDO			
R848	Chip	15 kohm 1/10 W			R89 R90	RES, Carbon Film 33 kohm 1/5 RES, Metal Film 390 ohm 1/5			(D503)	Not Used!		D,A				
R849	Chip	1 kohm 1/10 W .			R90 R91		5 W J 3069684970		(D503)	KIA7808PI, Regulator		2168606116 1				
R850	Chip	6.8 kohm 1/10 W . 100 kohm 1/10 W .				33 Vractor, SVC211SPA-C	2258817103		IC502	KIA7805PI, Regulator		2108499104 1 KS	PT INDO			
R851	Chip Chip	3.3 kohm 1/10 W							(IC502)	Not Used !		D,A				
R852 (R852	Chip Chip	1.8 kohm 1/10 W		1 D,PTINDO			no to consider the consideration and the constant		R501	Metal Film	3.3 ohm 2 W J	3029339570 1 ks.				
(R852 R853	Carbon Film	100 kohm 1/5 W			PCB2	ASSEMBLY P.C.BOARD MIC (KS, PT INDO	O AREA ONLY)		(R501)	Not Used!		D,A	4			
(R853				A,KS,PT INDO		CAPACITORS	A									
R854	Chip	56 kohm 1/10 W .	3099563870	1 D	C401		0 V M 3479347971		ar administration -	indentia a a cale.	SEPONE Har bedasinch	aki Marija se iak				
(R854	· · · · · · · · · · · · · · · · · · ·			KS,PT INDO,A		0p	0 V J 3539221210	1	PCB4	ASSEMBLY P.C.BOARD	n Ekoui	erupe Stiz CORSON - 1977				
R855	Chip	100 kohm 1/10 W .	3099104870		C403		5 V M 3479310061 0 V M 3479347971	1	C702/C703	CAPACITORS 3 Chin	0.047 uF 50 V Z	3539473060 2				
(R855				KS,PT INDO,A			6 V M 3479147935	1	C702/C703	Electrolytic SSE	47 uF 10 V M					
	R857 Chip	47 kohm 1/10 W .	3099473870		C405 C406	2.000.00,000	0 V K 3539562820	1	C704	Electric Back-up	0.047 F 5.5 V					
	/R857 Not Used !	1 Mohm 1/10 W .	1 3000105970	KS,PT INDO,A	C406		OV M 3479347971	1	C706	Chip	0.1 uF 50 V Z	3539104060 1				
R858		i Monini 1/10 VV .	, 5638103010	KS,PT INDO,A		Chip, CH 560 pF 56			C707	Chip	22 pF 50 V Z	3539220210 1				
(R858 R859		100 kohm 1/10 W .	3099104870		C409	Electrolytic SG 4.7 uF 56			C708	Trimmer, CH	10 pF	3838001140 1				
	R861 Chip	47 kohm 1/10 W			C410		0 V K 3539333820		C709	Chip, CH		3539330210 1				
	R863 Carbon Film	47 kohm 1/5 W			C411		0 V K 3539562820		C710	Electrolytic SSE		3479110035 1				
	R863 Chip	47 kohm 1/10 W .	3099473870		C412	Chip, CH 560 pF 50			C713/C714	4 Chip	0.1 uF 50 V Ž	3539104060 2				
	-R863 Not Used !			KS,PT INDO,A			0 V Z 3539473060 0 V K 3539103820			CONNECTORS						
					C415		0 V M 3479333871		CNT701	CONNECTORS Wafer, FPC, 20P		4426001120 1				
	COILS		004001000				60 V K 3539103820		CN1703 CNT702	Wafer, 13P		4428513826 1				
L701	Inductor, 1 mH 03		2648610283		C418 C419		5 V M 3479310061		CNT702	Lead Ass'y, 4P, 80mm		436404080732 1				
L801	Inductor, 20.8mH		2648601430	1 D KS,PTINDO,A		Electrony and the	0 V J 3539221210		5	v= y1 ) <del></del>						
(L801)			2608201120		C420		6 V M 3479147935			DIODES						
T801	AM-ANT		2638201150			3 Electrolytic SG 47 uF 1	6 V M 3479347031	2	D701-D707	7 1N4148, Switching		2058322101 7				
T802 T803	AM-OSC FM-DET-A		2838501110		C424	Chip 0.047 uF 5	0 V Z 3539473060									
T804	FM-DÈT-B		2838501210		C425		6 V M 3479347031			INTEGRATED CIRCUIT		0400000704				
T805	AM-IFT		2848001250		C426		0 V M 3479347971		IC701	CXP82324-331Q, CPU, I	DEP-449	2139322704 1				
	1807 MPX, 19 kHz, FB-7SG		2658301100		C427	Electrolytic SG 100 uF 1	0 V M 3479310121	1		COU						
T808	LW ANT		2608201130						1700	COIL		2648610283 1				
(T808)	Not Used !			KS,PT INDO,A		CONNECTOR	436405180732	1	L702	inductor, 1 mH 03		2040010200				
T809	LWOSC		2638401060		CNT401	Lead Ass'y, 5P, 180mm	-30-03 100/32			TRANSISTOR						
(T809)	Not Used !			KS,PT INDO,A		INTEGRATED CIRCUITS			Q701	BKTC3199Y, NPN		2208610109 1				
	OF IN PIVER BEALS	ne .			IC401	KIA4559S/KIA75559S	2168206103	1	<u></u> .	,						
1/000	SEMI FIXED RESISTOR	7.3	3248020243	1	IC401	ES56028E, Digital Echo	2138633001			RESISTORS						
VR801 VR802				1 KS,PTINDO,A					R701	Chip	100 kohm 1/10 W J					
VR802 (VR80			3248020343						R702-R706	6 Carbon Film	100 kohm 1/5 W J	3069104970 5				
141700																

												Part No. Q'	h. Msian	Ref. No.	Description			Part No. Q'ty Ve	ersion
Madal No . TV 7/	7							, A 5 4		Description	5.6 kohm 1/10 W J	3099562870 2		T806/T807	MPX, 19 kHz, FB-7SG			2658301100 2	
Model No. : TX-74	• /							1	R717/R718 R719-R721	•	1 kohm 1/10 W J	3099102870 3		T808	LW ANT			2608201130 1 D	S,PT INDO,A
		Part No. Q't	V Version	Ref. No.	Description		Part No. Q	ty Version	R719-R721		3.3 ohm 1/5 W J	3029339970 2		(T808)	Not Used !			2638401060 1 D	
Ref. No. Description PCB1 ASSEMBLY P.C	DOADD MAIN	1211119	1		CONNECTORS				R801	Chip	100 ohm 1/10 W J	3099101870		T809	LW OSC Not Used !				S,PT INDO,A
PCB1 ASSEMBLY P.C CAPACITORS	DUANU MAN	SQC.001.00.000S.0000.04.0000000.00.000	100	CNT101	Lead Ass'y, 6P, 160mm	;	36106163761 1	1	R802	Chip	1 kohm 1/10 W J	3099102870	 	(T809)	1401 0360 :				
C101 Chip	0.1 uF 50 V	Z 3539104060 1		CNT102	Wafer, 13P		4428525340	1 1	R803	Chip	560 ohm 1/10 W J 3.3 kohm 1/10 W J	3099561870 3099332870	1		SEMI FIXED RESISTORS	s			
C102 Chip, CH	100 pF 50 V			CNT103	Wafer, 13P		4428513820 4428515820	1	R804	Chip Chip	330 ohm 1/10 W J		! [	VR801	2 kohm (B)			3248020243 1	
C103 Chip	0.047 uF 50 V			CNT104 CNT105	Wafer, 15P Wafer, 9P		4428525300	1	R805 R806	Chip	470 ohm 1/10 W J		KS,D,A	VR802	50 kohm			3248050343 1 KS	
C104 Electrolytic SG		M 3479310971 1		CNT 105	Wire Trap, 5P		4428531105	1 KS,PT INDO	(R806)	Chip	330 ohm 1/10 W J	3099331870		(VR802)	20 kohm			3248020343 1 D 3248050243 1	
C105 Chip	0.047 uF 50 V 220 pF 50 V		KS DT INDO	(CNT401)	Not Used !			D,A	R807	Chip	10 kohm 1/10 W J			VR803	5 kohm (B)			3248020443 1	
C107 Chip, CH	220 pF 50 V	3 3333221210 1	D.A	CNT701	Wafer, FPC, 20P		4426001020	1 🗼	R808	Chip	3.3 kohm 1/10 W J			VR804	200 kohm			3240020440 /	
(C107) Not Used! C108 Electrolytic SG	10 uF 35 V	M 3479310061 1	1					į.	R809	Carbon Film	18 kohm 1/5 W J	3069183970			MISCELLANEOUS				
C108 Electrolytic SG C110 Chip, CH	220 pF 50 V		KS,PT INDO		DIODES		0050000404		(R809)	Carbon Film	47 kohm 1/5 W J	3069473970 3099220870		X801	Crystal, 7.2MHz			3978101031 1	
(C110) Not Used!			D,A	D101	1N4148, Switching		2058322101 2258599103	1	R810	Chip	22 ohm 1/10 W J 2.4 kohm 1/10 W J			TC801	Trimmer, 10P			3838001140 1	
C111/C112 Electrolytic SG		M 3479347031 2		D102	Zener, UZ 5.1 BSB 1N4148, Switching		2058322101	1	R811	Chip Chip	10 kohm 1/10 W J		1	TC803	Trimmer, 10P			3838001140 1 D	
C113 Electrolytic SG	4.7 uF 50 V	M 3479347971 1		D708	2 Zener, UZ 5.1 BSB		2258599103	2	R812 R813	Chip	68 kohm 1/10 W J		1	(TC803)	Not Used !				(S,PT INDO,A
(C113) Not Used!			D,A	D801	Zener, UZ 5.1 BSB		2258599103	1	R814	Chip	4.7 kohm 1/10 W J	3099472870	1	17	Heatsink Regulator TR			7505206210 1 Ks	),A
C114 Electrolytic SG		/ M 3479310061 1 / J 3539101210 4	1 1 n		5 1N4148, Switching		2058322101	4	R815	Chip	33 ohm 1/10 W J	3099330870		(17)	Not Used !			4438103010 1	^
C115-C118 Chip, CH	100 pF 50 V	J 3339101210 *	KS,PT INDO,A		7 1N4148, Switching		2058322101	2 D	R816	Metal Film	240 ahm 1/5W J	3029241970		20	Jack RCA, 2P Terminal Antenna, 4P			4408107120 1 A.	KS,PT INDO
(C115-C118) Not Used ! C711 Chip, CH	470 pF 50 V	/ J 3539471210 1	1		7) Not Used!			KS,PT INDO,A	R817	Metal Film	330 ohm 1/5 W J			21 (21)	Terminal Antenna, 4P			4408108220 1 D	
C712 Electrolytic SG	1 uF 50 V		1	VD1/VD2	Varactor, SVC321SPA-C		2258817104		R818	Chip	2 kohm 1/10 W J	3099202870 3099392870		22	Shield Plate			6165151910 1 A.	,KS,PT INDO
C801 Electrolytic SG	100 uF 16 V	/ M 3479310131 1	i	VD3	Varactor, SVC321SPA-C		2258817104	1 D KS,PT INDO,A	(R818)	Chip	3.9 kohm 1/10 W J 2.2 kohm 1/10 W J	3099392870	, <sub>D,F</sub> 1,7000	(22)	Not Used !			D	1
C802 Chip	0.047 uF 50 \		1	(VD3)	Not Used!			NO,FINDU,A	R819	Chip	2.2 kohm 1/10 W J	3099223870	1 KS,PT INDO.A	27	Shield Fence, Front-end			6163115510 1 A	
C803 Chip, CH	33 pF 50 \		1		INTEGRATED CIRCUITS				R820 (R820)	Chip Chip	12 kohm 1/10 W J	3099123870		(27)	Not Used !			D	•
C804 Chip	0.01 uF 50 \		1 4	IC101	LC7821		2168017132	1	(R820) R821	Chip	68 ohm 1/10 W J	3099680870	1		Front -End, FTH4-460V	T END		3928101850 1 D	
C805 Chip, CH	33 pF 50\		1 <b>4</b>	IC101	KIA4559S/KIA75559S		2168206103	1	R822	Chip	100 kohm 1/10 W J	3099104870	1		ASSEMBLY PCB FRON	I END	SOV K	54002009835 1 K 3511825235 1	A,UUMI 17,6
C806-C809 Chip	0.047 uF 50 \ 47 uF 16 \	/ Z 3539473060 4 / M 3479347031 1	1	IC102	KIA7806PI, Regulator		2168606110	1 KS,PT INDO	R823	Chip	47 kohm 1/10 W J	3099473870	1	C81	CAP, CeramicTubular, CAP, CeramicTubular	8.2 pF 100 pF	50 V J	3519101935 1	
C810 Electrolytic SG	100 pF 50\		3	(IC103)	Not Used !			D,A	R824	Chip	1 kohm 1/10 W J	3099102870	1	C83 C84	CAP, CeramicTubular	0.001 uF	50 V Z	3519102935 1	
C811-C813 Chip, CH C814 Chip, CH	330 pF 50 \			IC801	LA1266		2168017128	1	R825	Chip	560 ohm 1/10 W J		1	C85	CAP, CeramicTubular,	3.9 pF		3511395235 1	
C815 Electrolytic SG	1 uF 50\		1	IC802	LM7001M		2138017136	1	R826	Chip	10 kohm 1/10 W J 5.6 kohm 1/5 W J	3099103870	1	C86	CAP, CeramicTubular,	5.6 pF		3511565235 1	
C816 Chip	0.047 uF 50 \		1	IC803	AN7470		2168410101	•	R827	Carbon Film	100 ohm 1/10 W J			C87	CAP, CeramicTubular,	2.2 pF		3511225235 1	
C817 Electrolytic SG	10 uF 35\		1		TRANSISTORS				R828/R829	Chip	47 kohm 1/10 W J			C88	CAP, CeramicTubular,	18 pF		3511186135 1	
C818 Electrolytic SG	3.3 uF 50 \		1	Q101	TRANSISTORS DTC114YS		2208622106	1	R831 (R831)	Chip	33 kohm 1/10 W J		1 D,PT INDO	C89	CAP, CeramicTubular	0.001 uF		3519102935 1	
C819 Electrolytic SG	2.2 uF 50\		1	Q101	KRA107M/DTA114YS		2238006103	1	R832	Chip	22 kohm 1/10 W J	3099223870		C90	CAP, CeramicTubular,	8.2 pF		3511825235 1 3511335235 1	
C820 Chip	0.022 uF 50 \ 0.047 uF 50 \			Q103	2SA1515		2208722102	1	(R832)	Chip	27 kohm 1/10 W J			C91	CAP, CeramicTubular, CAP, CeramicTubular	3.3 pF 15 pF	50 V J	3519150935 1	
C821 Chip C822 Mylar	0.047 uF 50 \ 0.047 uF 100 \			Q104	BKTC3199Y, NPN		2208610109		R833	Chip	22 kohm 1/10 W J	3099223870	1 KS,A	C92 L81	Coil, Inductor, 0.47 uH	15 51	30 • 3	2648647882 1	
C822 Mytar C823 Chip, CH	470 pF 50\			Q702/Q70	3 DTC114TS		2208622108	2	(R833)	Chip	27 kohm 1/10 W J	3099273870	1 D,PTINOO	L82	Coil, Inductor, 2.2 uH			2648622982 1	
C824 Electrolytic SG		/ M 3479333971	1	Q801	Chip, KTC3880		2207606002	7	R834	Chip	8.2 kohm 1/10 W J 5.6 kohm 1/10 W J	3099622670	1 DETINDO	Q81	TR, KSC2786R			2208406128 1	
C825 Electrolytic SG	1 uF 50\	/ M 3479310971	1		3 BKTC3199Y, NPN		2208610109 2238006103	1	(R834)	Chip	10 kohm 1/10 W J			Q82/Q83	TR, KTC3193-0, NPN			2208406125 2	
C826 Chip	0.01.	/ Z 3539473060	1	Q804	KRA107M/DTA114YS 6 BKTC3199Y, NPN		2208610109	2	R835 R836	Chip Chip	8.2 kohm 1/10 W J			Q84	FET, 2SK544			2218217000 1	
C827 Electrolytic SG	V.E	/ M 3479322871	1		8 KRA107M/DTA114YS		2238006103		(R836)	Chip	5.6 kohm 1/10 W J		1 D,PT INDO	R81	RES, Carbon Film		1/5 W J	3069104970 1 3069333970 2	
C828/C829 Chip	0.01 uF 50 \		2		4 BKTC3199Y, NPN		2208610109	6 D	R837	Chip	1 kohm 1/10 W J			R82/R83	RES, Carbon Film		1/5 W J	3029221970 1	
C830 Electrolytic SG	4.7 uF 50 \ 47 uF 16 \	/ M 3479347031	1		14) Not Used !			KS,PT INDO,A	R838/R839	Chip	56 kohm 1/10 W J			R84 R85	RES, Metal Film RES, Carbon Film-		1/5W J	3069334970 1	
C831 Electrolytic SG C832 Chip	0.047 uF 50		1	Q815	KRA107M/DTA114YS		2238006103		R840-R842	•	3.3 kohm 1/10 W J			R86/R87	RES, Metal Film		1/5 W J	3029391970 2	
C833 Electrolytic SG	47 uF 16	*	1	(Q815)	Not Used !			KS,PT INDO,A	R843	Chip	10 kohm 1/10 W J 3.3 kohm 1/10 W J			R88	RES, Carbon Film	560 kohm	1/5 W J	3069564970 1	
C834/C835 Chip	0.047 uF 50 v	V Z 3539473060	2						(R843)	Chip	3.3 kohm 1/10 W J			R89	RES, Carbon Film		1/5 W J	3069333970 1	
C837 Electrolytic SG	10 uF 35		1	D404/D40	RESISTORS	1 kohm 1/10 W J	3099102870	2	R844 R845	Chip Chip	10 kohm 1/10 W J			R90	RES, Metal Film		1/5 W J	3029391970 1	
C838 Chip	0.07.	V Z 3539473060	1	R101/R10	2 Cnip 3 Metal Film	1 kohm 1/5 W J	3029102970		(R845)	Chip	3.3 kohm 1/10 W J			R91	RES, Carbon Film		1/5 W J	3069684970 1	
C839 CeramicTubula	0.001 uF 50		1	R114	Carbon Film		3069104970	1	R846/R847		3.9 kohm 1/5 W J		2	VD81-VD8	3 Vractor, SVC211SPA-C			2258817103 3	
C840 Chip		V Z 3539473060 V J 3539471210	1	R115	Chip	51 kohm 1/10 W J	3099513870	1	R848	Chip	15 kohm 1/10 W J								
C841 Chip, CH		V M 3479347971	1	R116	Metal Film	4,7 kohm 1/5 W J	3029472970	1 KS,PT INDO	R849	Chip	1 kohm 1/10 W J			PCB2	ASSEMBLY P.C.BOAR	D MIC (KS. PT	INDO ARE	(ONLY)	
C842 Electrolytic SG C843 Electrolytic SG		V M 3479310131		(R116)	Not Used !		2000 170270	D,A	R850	Chip	6.8 kohm 1/10 W J				CAPACITORS		engapanyan n <del>a panjaban na mara</del>	nace respective and representations are respectively and the series	
C843 Electrolytic SG		V M 3479310121		R117	Chip	4.7 kohm 1/10 W J			R851	Chip	100 kohm 1/10 W J 3.3 kohm 1/10 W J	3099104870 3099333870	1 KSA	C401	Electrolytic SG	4.7 uF		3479347971 1	
C845 Chip	120 pF 50	V J 3539121210		(R117)	Chip	0 ohm 1/10 W J 2.2 kohm 1/10 W J			R852	Chip Chip	3.3 kohm 1/10 W J 1.8 kohm 1/10 W J	3099182870	1 D.PT INDO	C402	Chip, CH	220 pF		3539221210 1	
C846 Chip		V K 3539152820		R118 (R118)	Chip Chip	1 kohm 1/10 W J			(R852) R853	Carbon Film	100 kohm 1/5 W J	3069104970	1 D	C403	Electrolytic SG			3479310061 1	
(C846) Chip		V K 3539102820		(R118) R119	Chip	2.2 kohm 1/10 W J			(R853)	Not Used!			KS,PT INDO,A	C404	Electrolytic SG	4.7 uF		3479347971 1 3479147935 1	
C847 Chip		V K 3539152820 V K 3539102820		(R119)	Not Used!			D,A	R854	Chip	56 kohm 1/10 W J	3099563870		C405	Electrolytic SSE	4.7 uF 0.006 uF		3539562820 1	
(C847) Chip		V M 3479322971	1	R120	Chip	51 kohm 1/10 W J			(R854)	Not Used !			KS,PT INDO,A	C406 C407	Chip Electrolytic SG	4.7 uF		3479347971 1	
C848 Electrolytic SG C849 Chip		V K 3539222820	1	R121	Metal Film	4.7 kohm 1/5 W J	3029472970		R855	Chip	100 kohm 1/10 W J	3099104870		C408	Chip, CH	560 pF		3539561210 1	
C849 Chip C850 Electrolytic SG		V M 3479322971		(R121)	Not Used !	4.7 ()	2000470070	D,A	(R855)	Not Used !	47 kohm 1/10 W J	3000472970	KS,PT INDO,A	C409	Electrolytic SG	4.7 uF		3479347971 1	
C851 Chip	0.002 uf 50	V K 3539222820	1	R122	Chip	4.7 kohm 1/10 W J 0 ohm 1/10 W J			R856/R857	•	47 KONM 1/10 W J	3033413010	KS,PT INDO,A	C410	Chip	0.033 uF		3539333820 1	
C852 Chip, CH		V J 3539150210		(R122)	Chip	2.2 kohm 1/10 W J			(R856/R857 R858	Not used ! Chip	1 Mohm 1/10 W J	3099105870		C411	Chip	0.006 uF			
C853 Chip	0.047 uF 50	V Z 3539473060		R123	Chip Chip	1 kohm 1/10 W J			(R858)	Not Used!	. 19101111 1710 17 0		KS,PT INDO,A	C412	Chip, CH			3539561210 1	
(C853) Not Used !	=	, , , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	KS,PT INDO,A	(R123) R124	Chip	2.2 kohm 1/10 W J			(R859)	Chip	100 kohm 1/10 W J	3099104870		C413/C41	•			3539473060 2	
C854 Chip	0.047 uF 50	V Z 3539473060	1 D KS,PT INDO,A	(5.45.4)	Not Used !			D,A	R860/R861		47 kohm 1/10 W J	3099473870	1 D	C415	Chip 7 Electrolytic SC			3539103820 1 3479333871 2	
(C854) Not Used !	180 pF 50	V J 3539181210		R125/R120		100 ohm 1/5 W J				Carbon Film	47 kohm 1/5 W J	3069473970	1 D		7 Electrolytic SG Chin			3539103820 1	
C855 Chip, CH	180 pF 50		KS,PT INDO,A		Chip	47 kohm 1/10 W J			(R860-R863				KS,PT INDO,A	C418 C419	Chip Electrolytic SG		35 V M	3479310061 1	
(C855) Not Used !	33 pF 50	V J 3539330210		R128	Chip	3.3 kohm 1/10 W J								C420	Chip, CH	220 pF		3539221210 1	
C856 Chip, CH (C856) Not Used!	35 pt 00		KS,PT INDO,A		Metal Film	22 ohm 1 W J	3029220470			COILS		2648610284	1	C421	Electrolytic SSE			3479147935 1	
C857 Chip, CH		V J 3539471210		(R129)	Not Used !	10 kahm 1/5 \\	3069103970	D,A 1	L701	Inductor, 1 mH 04		2648610284		C422/C42	•	47 uF	16 V M	3479347031 2	
C858/C859 Chip, CH		V J 3539101210	2 D	R130	Carbon Film		3069103970	1	L801	Iductor, 20.8mH		20-0001400	KS,PT INDO,A	C424	Chip	0.047 uF		3539473060 1	
(C858/C859 Not Used )			KS,PT INDO,A	R712 R713	Chip Carbon Film		3069224970	1	(L801) T801	Not Used ! AM-ANT		2608201120		C425	Electrolytic SG			3479347031 1	
•				R713 R714	Carbon Film		3069104970		T802	AM-OSC		2638201150		C426	Electrolytic SG	4.7 uF		3479347971 1	
FILTERS		2072044004	2 Ke 4	R714 R715	Chip	4.7 kohm 1/10 W J			T803	FM-DET-A		2838501110		C427	Electrolytic SG	100 uF	- 10 V M	3479310121 1	
CF801/802 SFE 10.7MA8-		3978011001 3978011011		R716	Carbon Film	5.6 kohm 1/5 W J			T804	FM-DET-B		2838501210							
(CF801/802) SFE 10.7MS30	ı	3908001080							T805	AM-IFT		2848001250	1						
CF804 CFM2-450BL		55555,000																	
								40											

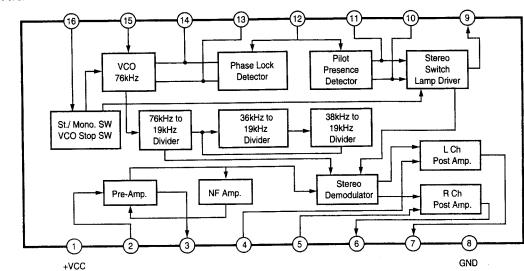
### Model No.: TX-747

## ## ## ## ## ## ## ## ## ## ## ## ##	Ref. No.	Description				Part No. (	u ty	AGLZION	Ref. No.	Description					Q'ty Version
HITERATE PICHUTS						36405180733	1		0701					2208610109	1
Color	NT401	Lead Ass'y, 5P, 180mm				30403160732	'		Q/UI	DATOSTST, NEW					
Color		INTEGRATED CIRCUITS								RESISTORS					
Septimore   Part   Pa	401					2168206103	1		R701		100	kohm	1/10 W J	3099104870	1
RESISTORS						2138633001	1			•	100	kohm	1/5 W J	3069104970	5
RESISTORS   3   000   11   11   12   300   300   12   12   13   300   12   13   300   30	702	20000202, 2.9												3069103970	1
Chip		RESISTORS													
Che	401		0	ohm 1.	/10 W J	3099000870	1			•	100	kohm	1/5 W J	3069104970	3
Comparison			4.7 k	ohm 1	/10 W J	3099472870	1		10,0010	<b>54.25</b>					
0.00 Chip 100 Juhr 110 W J 2009104570 1		•				3099102870	1			MISCELLANEOUS					
Che						3099104870	1		¥701					3978011001	1
Control   Cont		•	10 k	cohm 1	/10 W J	3099103870	1							2328002306	1
100   Chip   12   John 170 W J   3096962270   1   1   1   1   1   1   1   1   1			15 k	cohm 1	/10 W J	3099153870	1							4658003710	11
Chip   12   Norm 11/04   J   3098912370   1		•	8.2 k	cohm 1	/10 W J	3099822870	1		20	GG.					
Company   Comp		•	12 F	kohm 1	/10 W J	3099123870	1								
1419		•	3.3	kohm 1	/10 W J	3099332870	1		PCB5	ASSEMBLY P.C.BOARD R	MC	S.			
111 Chip 15 kehm 11/0 W J 3089133270 1 CNT703 Convector. Were Trap. 5P 442835104 1 Chip 10 kehm 11/0 W J 3089133270 1 CNT703 Convector. Were Trap. 5P 442835104 1 CNT70 TFATT-588, Remote Sensor 240000000 1 A658004010 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 29 Swech Tact 4658004010 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 CNT 7 Chip 68 kehm 11/0 W J 309813270 1 CNT 7 C		•	12 F	kohm 1	/10 W J	3099123870	1			Selected and the contraction of the selection of the contraction of th			35 V		
12   Chip   10   Nohm   110 W J   3089103870   1   29   Switch   Tract   3089103870   1   29   Switch   Tract   3089103870   1   29   Switch   Tract   308910410   1   1   1   1   1   1   1   1   1		•	15 H	kohm 1	/10 W J	3099153870	1							4428531104	1
13		*	10 }	kohm 1	/10 W J	3099103870	1				г			2408005001	1.
ASSEMBLY P.C.BOARD FOWER   100 V J S07940370   1   1   1   1   1   1   1   1   1						3099153870	1			•					
1415 Chip 68 kom 11/10 W J 3099852870 1 1416 Chip 68 kom 11/10 W J 3099852870 1 1417 Chip 68 kom 11/10 W J 3099852870 1 1417 Chip 68 kom 11/10 W J 3099852870 1 1417 Chip 22 kom 11/10 W J 3099852870 1 1418 Chip 22 kom 11/10 W J 3099852870 1 1418 Chip 23 kom 11/10 W J 3099852870 1 1418 Chip 30 kom 11/10 W J 3099852870 1 1420 Chip 10 kom 11/10 W J 3099104870 1 1421 Chip 10 kom 11/10 W J 3099104870 1 1422 Chip 10 kom 11/10 W J 3099104870 1 1423 Chip 11 kom 11/10 W J 3099104870 1 1424 Chip 10 kom 11/10 W J 3099104870 1 1425 Chip 10 kom 11/10 W J 3099104870 1 1426 Chip 10 kom 11/10 W J 3099104870 1 1427 Catton Film 15 kom 11/10 W J 3099104870 1 1428 Maul Film 15 kom 11/10 W J 3099104870 1 1428 Chip 10 kom 11/10 W J 3099104870 1 1429 Maul Film 15 kom 11/10 W J 3099104870 1 1429 Maul Film 15 kom 11/10 W J 3099104870 1 1420 Maul Film 15 kom 11/10 W J 3099104870 1 1420 Maul Film 15 kom 11/10 W J 3099104870 1 1420 Maul Film 15 kom 11/10 W J 3099104870 1 1421 Maul Film 15 kom 11/10 W J 3099104870 1 1422 M Maul Film 17 K M J 3099104870 1 1423 M Maul Film 17 K M J 3099104870 1 1424 M M M M M M M M M M M M M M M M M M	414	•					1								
Chip	415	·	68 1	kohm 1	/10 W J		1								
147	R416		6.8	kohm 1	/10 W J		1								
1418	417	•	68	kohm 1	/10 W J		1								
149 Chip 560 ohm 1/10 W J 306415870 1 4 4270 Chip 15 kohm 1/10 W J 306415870 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	418	•	27	kohm 1	/10 W J		1								
Chip	419	•					1								
### ### ### ### ### ### ### ### ### ##	420	•	15	kohm 1	I/10 W J										
1															
Chip	423		1 :	kohm 1	1/10 W J										
ASSEMBLY P.C.BOARD FOWER   10 ohm 1/5 W J 3098473870   1	3424														
Media Film 10 ohm 1/5 W J 3026109970 1  MISCELLANEOUS Jack Phone Sheid Free:	R425		47												
MISCELLANEOUS Jack Phone Shield Ferce O Volume Mit, 10 kohm  Shiel	R426	•	10	ohm	1/5 W J										
MISCELLANEOUS	R427	Carbon Film	15	kohm	1/5 W J	3069153970	1								
Jack Phone Shield Fence Shield Fence O Volume Mic. 10 kohm Shield Fence O Volume Mic. 10 kohm Shield Fence O Volume Mic. 10 kohm Shield Fence Shield															
Sheld Fonce   6165146110   1 OBS   ASSEMBLY P.C.BOARD POWER   501-0503 Mylar   0,047   0F 100 V J 3678473120   3 504   Electrolytic SD   4700   0F 25 V M 347931971   1 505   Electrolytic SD   0,047   0F 25 V M 347931971   1 506   Caramic Tubular   0,022   0F 25 V M 347931971   1 507   Electrolytic SG   1   0F 50 V M 347931971   1 507   Electrolytic SG   1   0F 50 V M 347931971   1 507   SUbsect   1 507   Not Used   0 503   INAHAR, Switching   2 508   Electrolytic SG   1   0F 50 V M 347931971   1 509   INAMOS, Recifier   2 503   INAHAR, Switching   2 503   INAHAR, Switching   2 504   Electrolytic SG   1 505   KL/72605PI, Regulator   2 505   KL/72605PI, Regulator   2 506   KL/72605PI, Regulator   2 506   KL/72605PI, Regulator   2 507   Valer   6 508   Wafer , 6P   0 509   0   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0   0   0 509   0   0   0		MISCELLANEOUS													
ASSEMBLY P.C.BOARD POWER   100 V J   3079473120 3	1	Jack Phone													
CB3	)	Shield Fence													
10	10	Volume Mic, 10 kohm				3208052410	1								
Doctor   D		3 Mylar Electrolytic SD	0.047 4700	uF uF uF	100 V J 25 V M 50 V M	3679473120 3409347248 3479310971	3 1 1								
Second   S	C506		0.022	uF	25 V Z	3579223530	1								
Section   Sect	(C506)	Not Used !													
100   100	C507	Electrolytic SG	1	ųF	50 V M	34/93109/1	7								
NA148, Switching   2058322101   1   Ks.pFINDO   DA	C507)					0000540400	2								
Solidar   Soli	D503	1N4148, Switching						KS,PT INDO							
Compage						2168606116	1								
CSD2   Not Used		-				2108499104	1	KS,PT INDO							
Metal Film   3.3 ohm   2 W J   3029339570   1 KSPTINDO   D.A								D,A							
R801) Not Used 1 Vafer, 6P  ASSEMBLY P.C.BOARD FRONT  CAPACITORS  C702/C703 Chip 0.047 uF 50 V Z 3539473060 2 Flectriolytic SSE 47 uF 10 V M 3479147025 1 Flectriolytic SSE 47 uF 55 V 3439247315 1 Florid Chip 0.1 uF 50 V Z 3539104060 1 Florid Chip 0.1 uF 50 V J 3539220210 1 Florid Chip 0.1 uF 50 V J 3539220210 1 Florid Chip 0.1 uF 50 V J 3539300140 1 Florid Chip 0.1 uF 50 V Z 3539104060 2 Florid Chip 0.1 uF 50 V Z 3539104060 2 Florid Chip 0.1 uF 50 V Z 3539300110 1 Florid Chip 0.1 uF 50 V Z 3539300110 1 Florid Chip 0.1 uF 50 V Z 3539104060 2 Florid Chip 0.1 u			3.3	ohm	2W J	3029339570	1	KS,PT INDO							
P501 Wafer, 6P 4428505810 1  PCP4 ASSEMBLY P.C.BOARD FRONT CAPACITORS  P502/C703 Chip 0.047 uF 50 V Z 3539473060 2  P104 Electrolytic SSE 47 uF 10 V M 3479147025 1  P105 Electrolytic SSE 47 uF 50 V Z 3539104060 1  P105 Chip 0.1 uF 50 V Z 3539104060 1  P107 Chip, CH 22 pF 50 V J 3539220210 1  P108 Trimmer, CH 10 pF 3838001140 1  P109 C10 Electrolytic SSE 10 uF 16 V M 3479110035 1  P109 C10 Electrolytic SSE 10 uF 50 V Z 3539104060 2  P109 CNT701 Chip 0.1 uF 50 V Z 3539104060 2  P109 CNT703 Wafer, FPC, 2DP 4426001120 1  P109 CNT703 Lead Ass'y, 4P, 80mm 36404080732 1  P109 CNT703 IN4148, Switching 2058322101 7  P109 CNTCOT CXP82324-331Q, CPU, DWP449 2139322704 1															
CONNECTORS  CONNECTORS  CONNECTORS  CONNECTORS  CONTOLOTORS  CONNECTORS  CONNECTO						4428505810	1								
CAPACITORS Chip 0.047 uF 50 V Z 3539473060 2 C702/C703 Chip 0.047 r 5.5 V 3479147025 1 C705 Electric Back-up 0.047 r 5.5 V 3438247315 1 C706 Chip 0.1 uF 50 V Z 3539104060 1 C707 Chip, CH 22 pF 50 V J 3539220210 1 C708 Trimmer, CH 10 pF 3838001140 1 C709 Chip, CH 33 pF 50 V J 3539330210 1 C710 Electrolytic SSE 10 uF 16 V M 3479110035 1 C713/C714 Chip 0.1 uF 50 V Z 3539104060 2 CNNECTORS CNT701 Wafer, FPC, 20P 4426001120 1 CNT703 INA148, Switching 2058322101 7  INTEGRATED CIRCUIT C701 CXP82324-331Q, CPU, DWP449 2139322704 1	<del>-</del> ·			end a	and the second second	and the second second second	seen oo n	pës							
Electrolytic SSE	PCB4	CAPACITORS													
Constant															
Converse	C704														
CONNECTORS CNT701 Wafer, FPC, 20P		·													
Trimmer, CH 10 pF 3838001140 1 C709 Chip, CH 33 pF 50 V J 3539330210 1 C713/C714 Chip 0.1 uF 50 V Z 3539104060 2  CONNECTORS CNT701 Wafer, FPC, 20P 4426001120 1 CNT703 Lead Ass'y, 4P, 80mm 36404080732 1  DIODES C701-D707 1N4148, Switching 2058322101 7  INTEGRATED CIRCUIT C701 CXP82324-331Q, CPU, DWP449 2139322704 1		•													
CONNECTORS CNT701 Wafer, FPC, 20P CNT703 Lead Ass'y, 4P, 80mm  DIODES CT01-D707 1N1EGRATED CIRCUIT CT01 CXP82324-331Q, CPU, DWP449  CNT01 Chip. CH 33 pF 50 V J 3539330210 1 353930210 1 3539302					20 V 3										
CONNECTORS					50 V J										
CONNECTORS Wafer, FPC, 20P Lead Ass'y, 4P, 80mm  DIODES TNT01-D707  INTEGRATED CIRCUIT C701  C70															
CONNECTORS Wafer, FPC, 20P 4426001120 1 CNT703 Lead Ass'y, 4P, 80mm 36404080732 1  DIODES D701-D707 1N4148, Switching 2058322101 7  INTEGRATED CIRCUIT C701 CXP82324-331Q, CPU, DWP449 2139322704 1															
CNT701     Wafer, FPC, 20P     4426001120     1       CNT703     Lead Ass'y, 4P, 80mm     36404080732     1       DIODES       0701-D707     1N4148, Switching     2058322101     7       INTEGRATED CIRCUIT       C701     CXP82324-331Q, CPU, DWP449     2139322704     1	C/13/C714	4 Unip	0.1	ur	30 V Z	3000 104000	_								
DIODES 0701-D707 1N4148, Switching 2058322101 7  INTEGRATED CIRCUIT C701 CXP82324-331Q, CPU, DWP449 2139322704 1	CNT701	Wafer, FPC, 20P													
INTEGRATED CIRCUIT  C701 CXP82324-331Q, CPU, DWP449 2139322704 1		DIODES						•							
C701 CXP82324-331Q, CPU, DWP449 2139322704 1	D701-D70														
	C701		DWP449	)		2139322704	. 1								

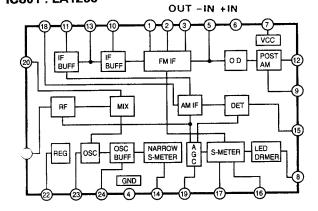
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# IC FUNCTIONAL BLOCK DIAGRAM

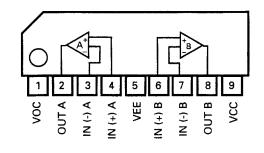
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IC801 : LA1266

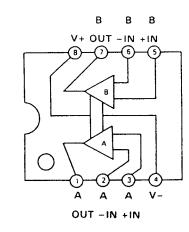


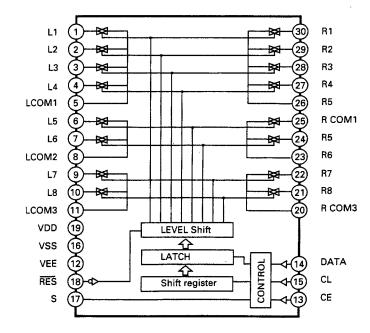
IC102, IC306, IC401 : KIA4559S/KIA75559S



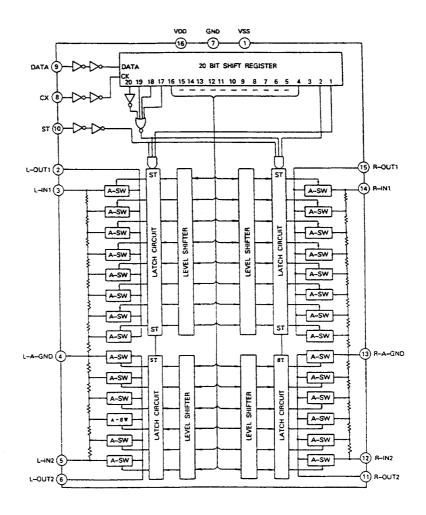
IC101: LC7821

## IC304: KIA4559S/KIA75559P



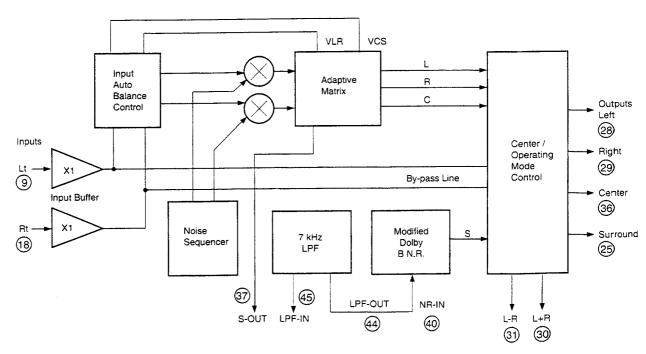


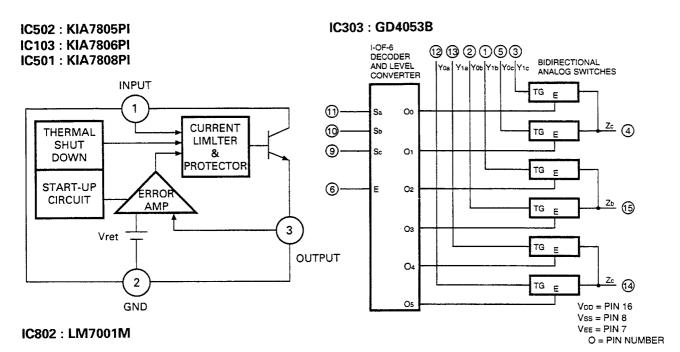
### IC305: TC9176P

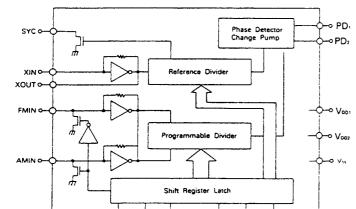


## IC301: NJM2177FB3

**建设的的控制等等等等的** 

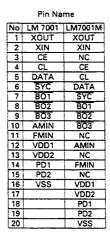


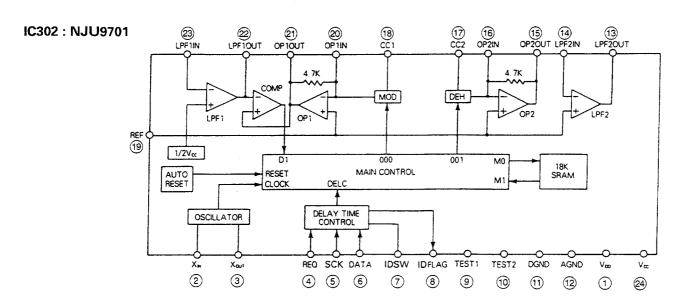




ş

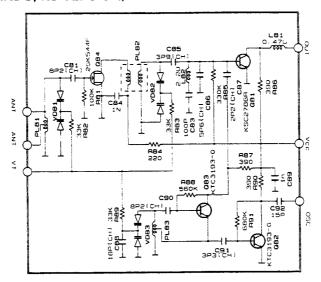
DATA



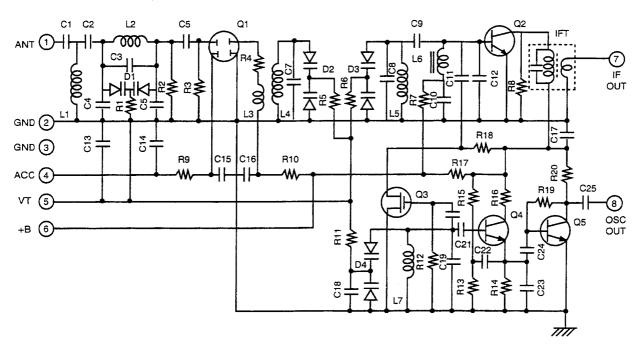


BOZ

## FM FRONT - END (A, PT INDO, KS VERSION)



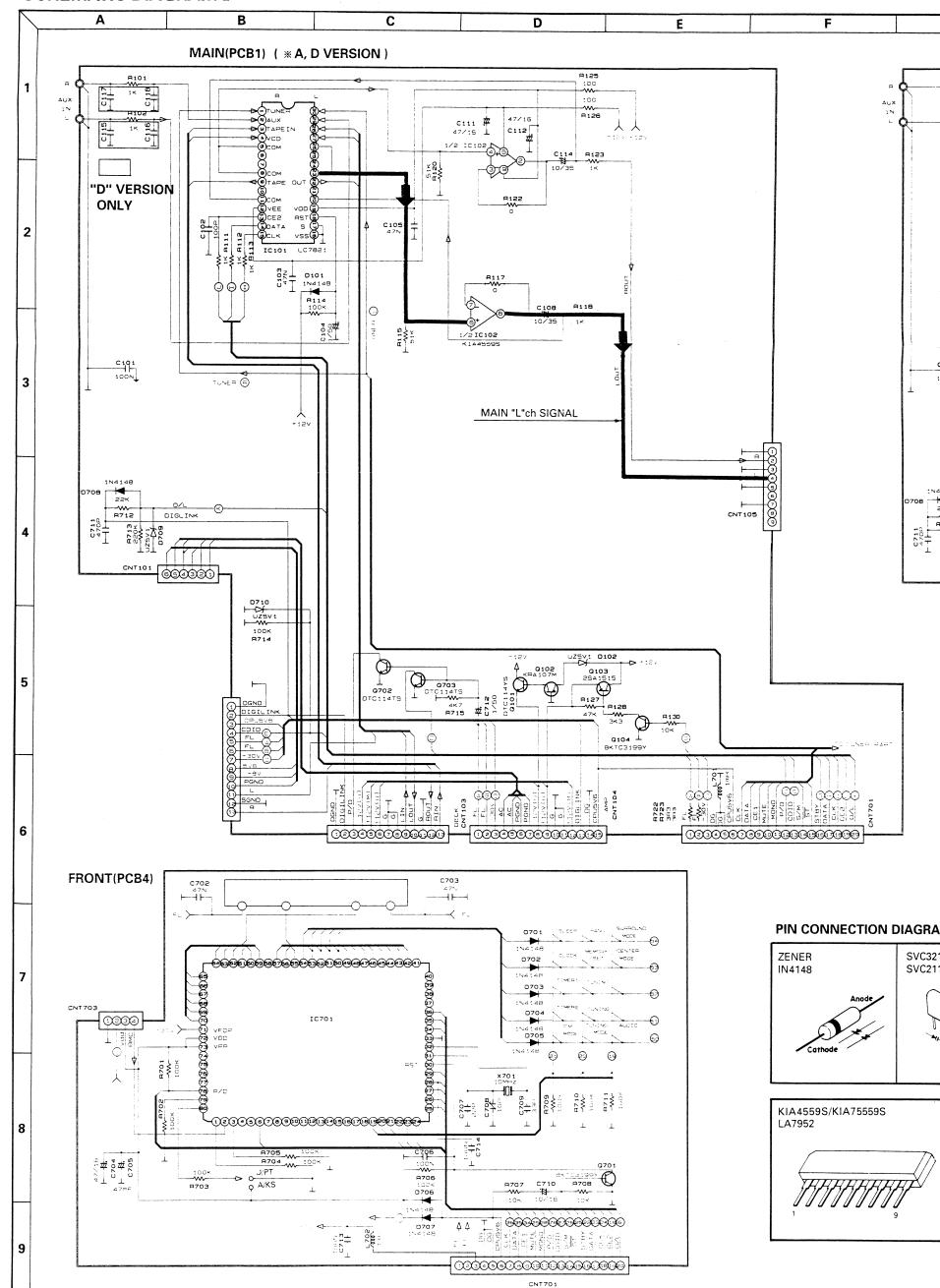
### FM FRONT - END FTA4 - 460V (D Version)



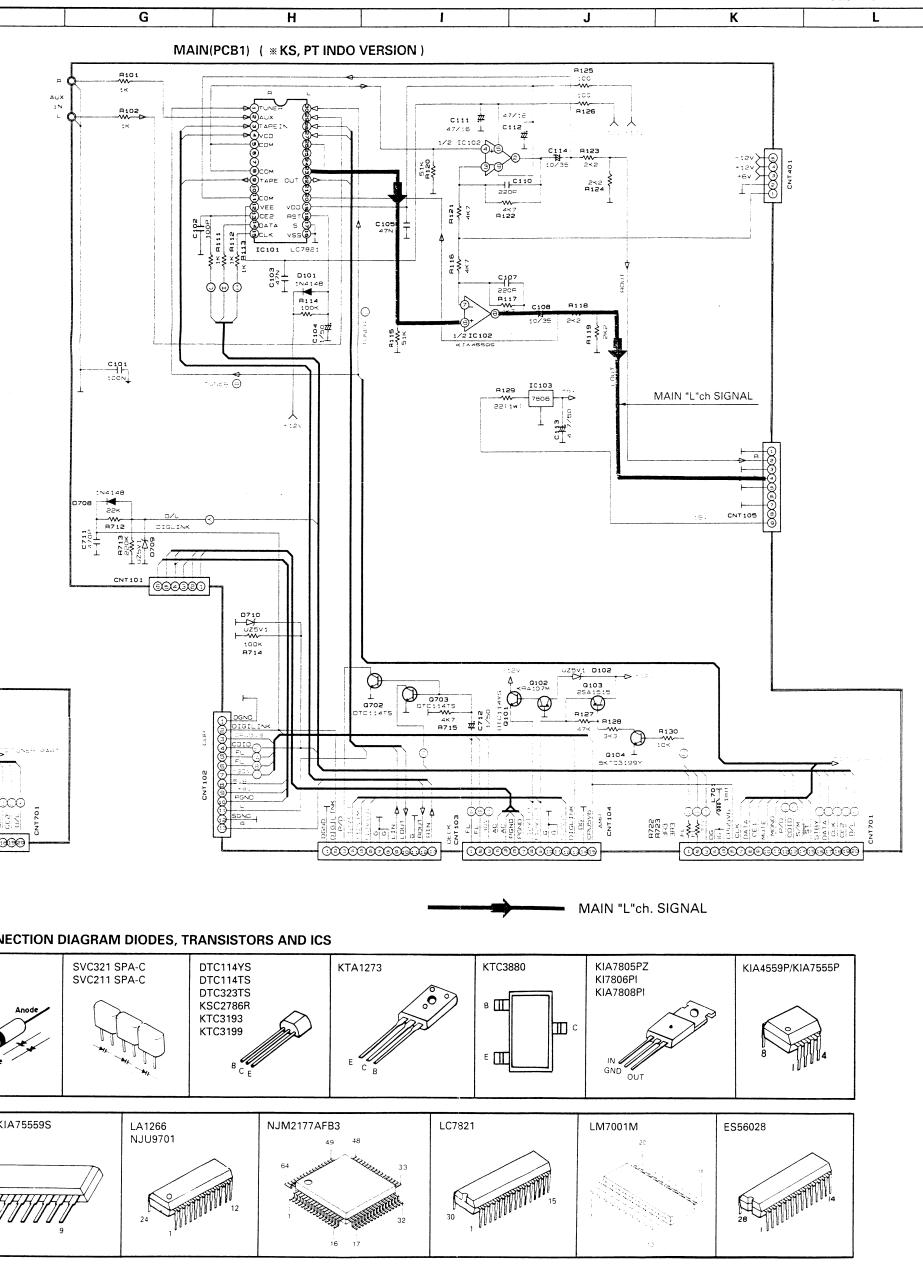
Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content	Ref. No.	Content
IFT	10.7 MHz	C1	22 pF	C11	1 pF	C21	8 pF	R1	33 ко	R11	33 ко	Q1	3SK 180
		C2	15 pF	C12	22 pF	C22	27 pF	R2	100 ко	R12	10 ко	Q2	2SC3142
L6	2.2 or 1 MHz	С3	0~5 pF	C13	22 pF	C23	20 pF	R3	100 ка	R13	10 kg	Q3	2SK 543
		C4	18 pF	C14	22 nF	C24	2 pF	R4	22~330 Ω	R14	1~1.8 ко	Q4	2SC2814
L1~L5, L7	AIR WIL	C5	7 pF	C15	0~22 nF	C25	15 pF	R5	33 ко	R15	10 Kg	Q5	2SC2814
		C6	7 pF	C16	22 nF			R6	33 ко	R16	330 Ω	D1	KV1440
		C7	4~10 pF	C17	22 nF			R7	1~3.3 №	R17	100 Ω	D2	KV1440
		C8	0~7 pF	C18	33~68 pF			R8	-	R18	470 Ω	D3	KV1440
		C9	5 pF	C19	0~5 pF			R9	10 ко	R19	330 ко	D4	KV1440
		C10	100 or 220 pF	C20	2 pF			R10	100~1 ко	R20	<b>330</b> Ω		

# NOTE

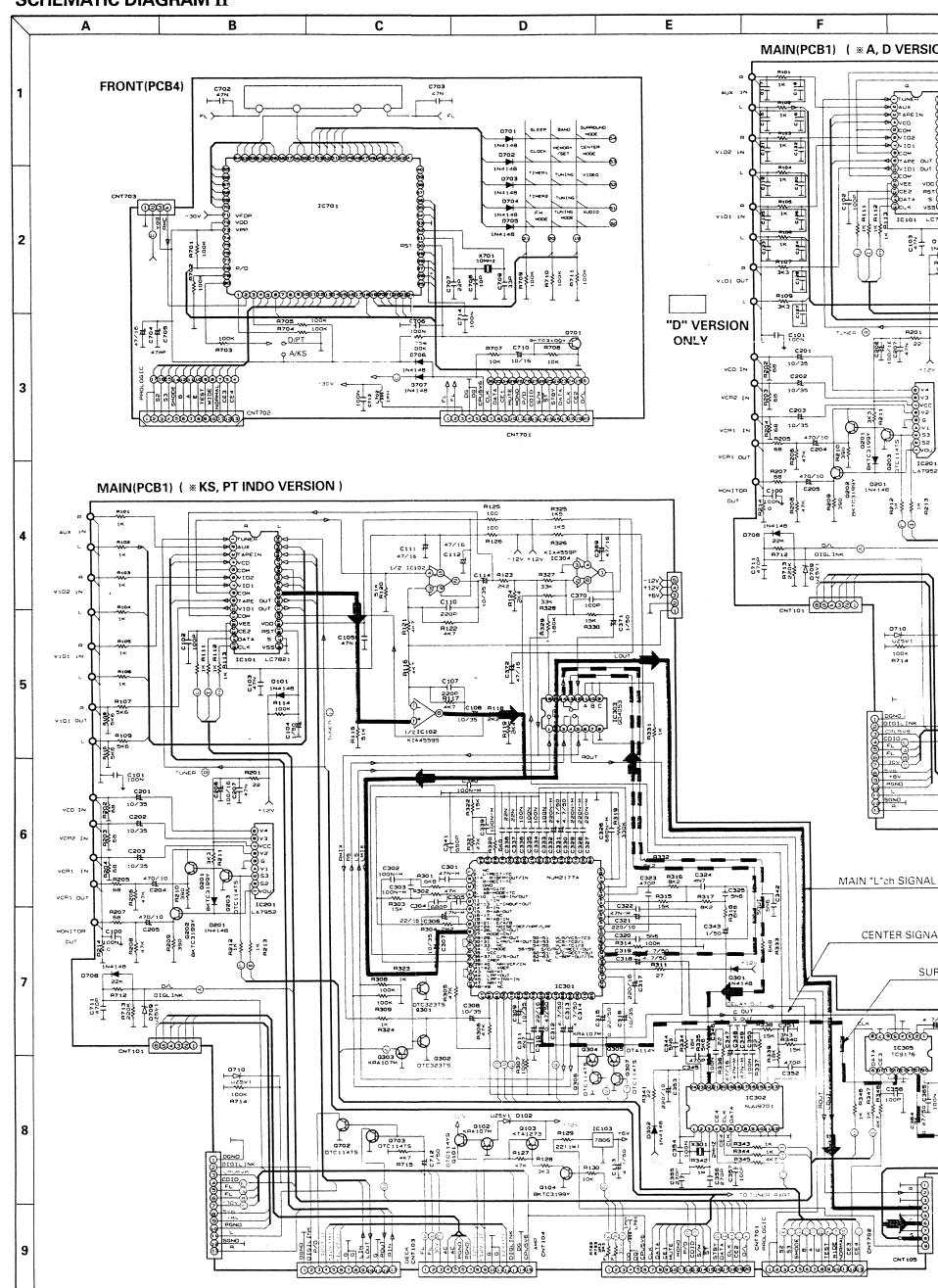
## **SCHEMATIC DIAGRAM I**



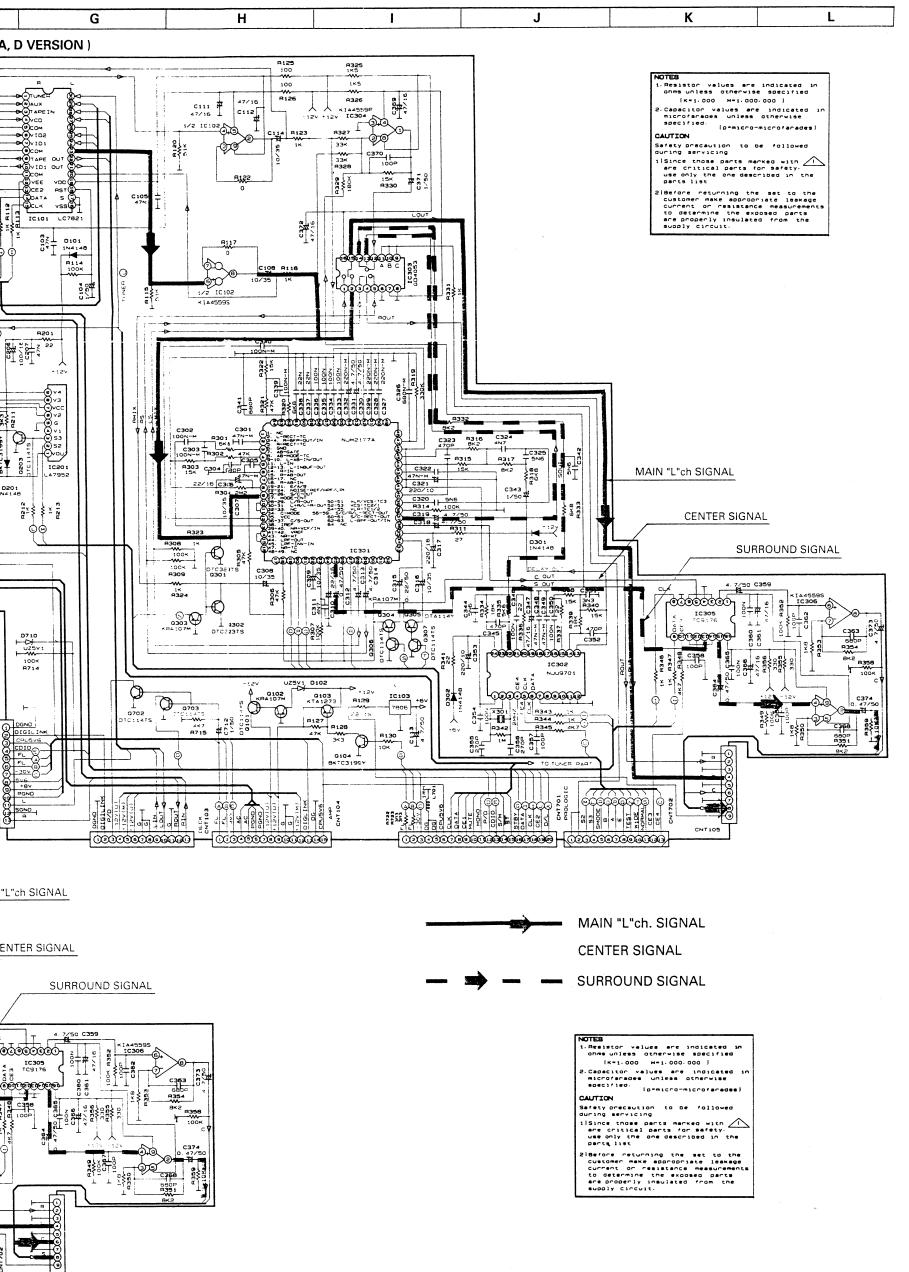
Model No.: TX-747



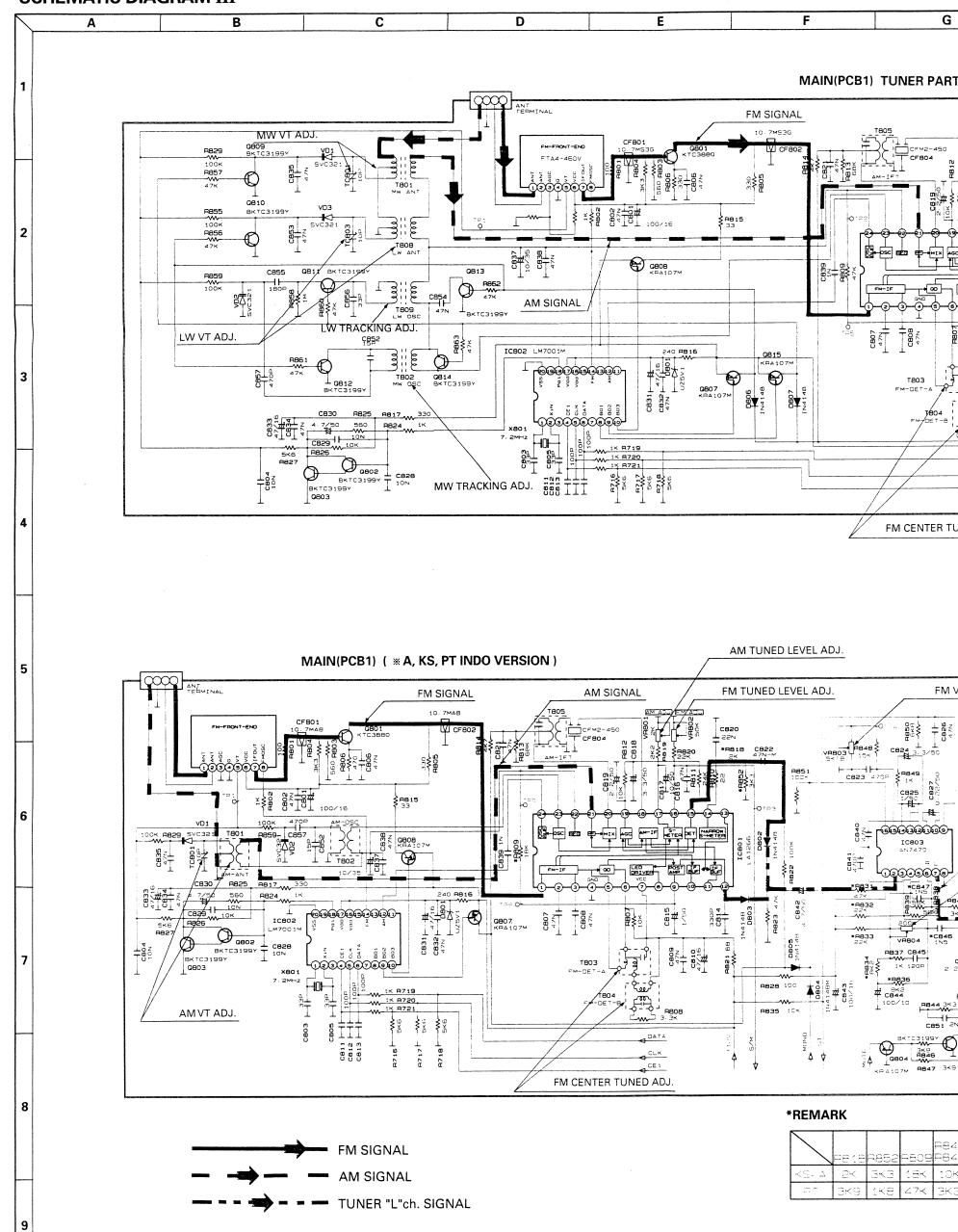
## **SCHEMATIC DIAGRAM II**



Model No.: TX-757



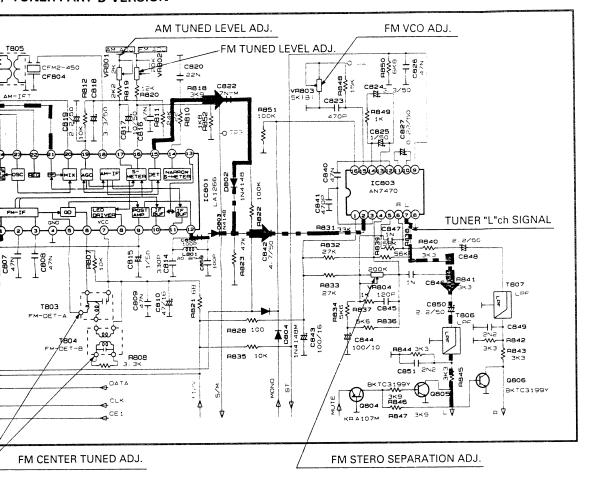
## **SCHEMATIC DIAGRAM III**

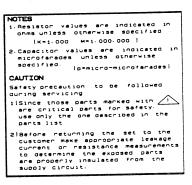


Model No: TX-757/ TX-747

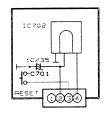
			1/	1
•	L	J	K	L L

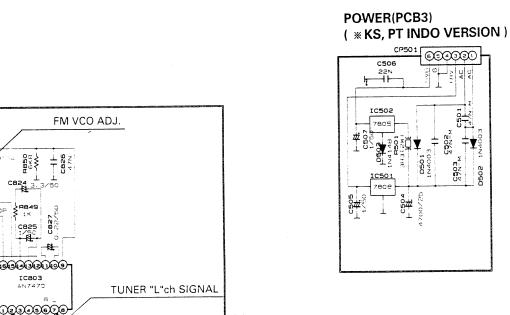
## ) TUNER PART D VERSION

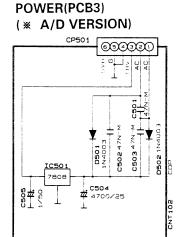


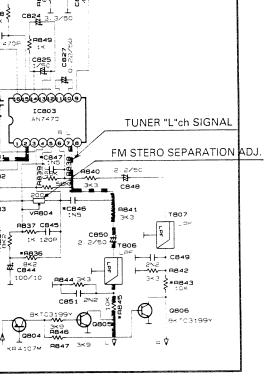


### RMC(PCB5)

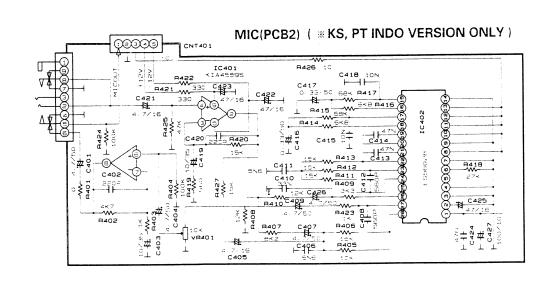


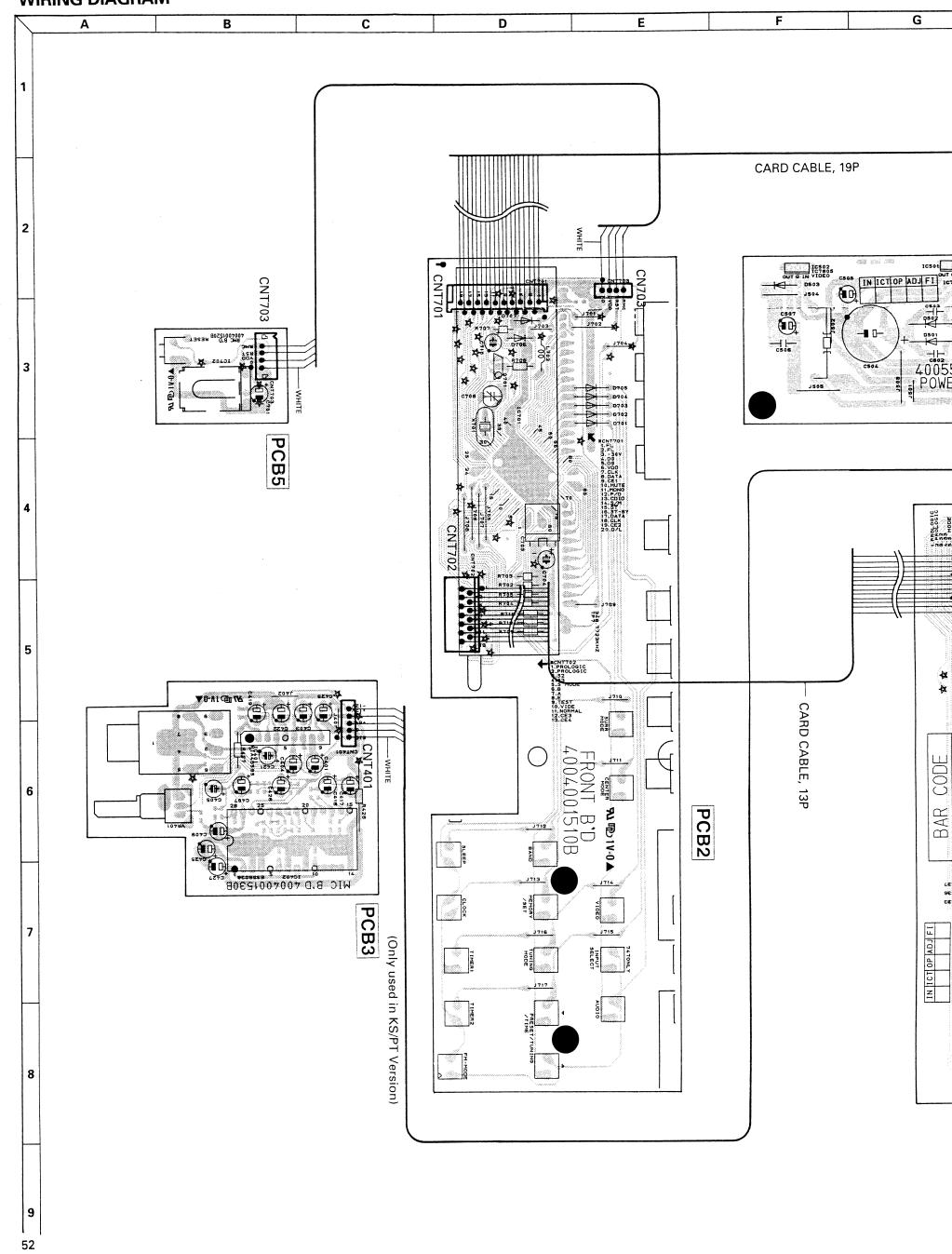




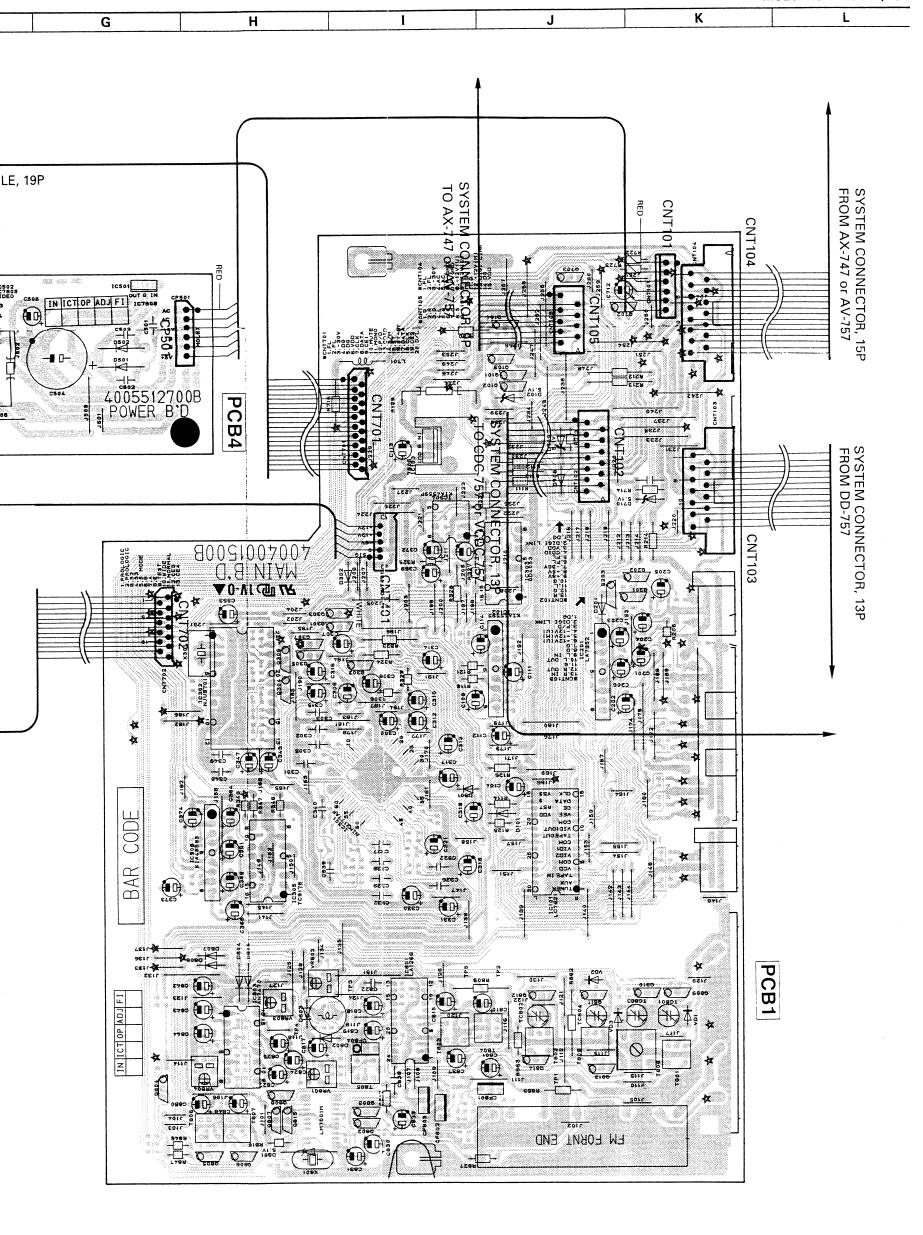


		R843	R832	<b>=</b> 534		C846
3852					F831	CB47
зкз	18K	10K	22K	3	47K	1N5
1K8	474	3K3	27K	546	33K	1N





Model No. : TX-747/757



# VCDC-757/CDC-757 •

## **SPECIFICATIONS**

#### **GENERAL**

Transmission bit ratio
Transmission on clock

Error correction

4.3218 Mbit/sec

16.9344 MHz

CIRC C1: Double correction

C2: Quadruple correction

### PICK-UP

System object lens type Object lens drive system

Optical source Wave length

Tracking system

Optical pick-up

2 Dimensional parallel drive type

Semiconductor laser

780 nm

3 Beam tracking servo type

#### OTHER

D/A Converter

1 bit twin with digital filter

#### **ELECTRICAL**

- Measuring methods in confirmity with EIAJ CP-307, CCIR 468-3
- · Reference level: 0 dB
- Test disc: SONY CD-3 YEDS-7, A,BEX TCD725
- Filter: 30 kHz, 18 dB/oct low pass filter

Description		Track	Nominal	Limit
Frequency Response at 20 Hz - 20 kHz		2 - 13	± 1.0 dB	± 2.0 dB
Signal to Noise Ratio at 1 kHz (Weighted A)		23	75 dB	70 dB
Dynamic Range at 1 kHz, 60 dB (Weighted A)		20	75 dB	70 dB
Total Harmonic Distortion at 0 dB				
Total Tialification Districts and Table	100 Hz	4	0.06%	0.1%
	1 kHz	7	0.06%	0.1%
	20 kHz	13	0.08%	0.1%
Channel Separation at 1 kHz (Selective)	1	30, 34	55 dB	50 dB
Channel Unbalance at 1 kHz		7	±1.0 dB	$\pm2.0\mathrm{dB}$
Access Time (Track to next track)			7 sec	9 sec
Disc Defects			1	
	Black dot	10 - 15	700 uM	700 uM
	Interrupt	3 - 9	Mu 008	800 uM
	Fingerprint	17 - 19	ALL	ALL
De-emphasis		39	± 0.2 dB	± 0.3 dB
DC CITIPAGE	:	40	$\pm0.3\mathrm{dB}$	±0.5 dB
		41	$\pm$ 0.5 dB	± 1.0 dB

#### **ENVIRONMETAL**

### Test to specification

Temperature between 59°F (15°C) and 95°F (35°C) and relative humidity between 45% and 75%, with power supply voltage of 10% the normal supply voltage.

Test disc: SONY YEDS-7 or ABEX TCD784, TCD725.

### Operation

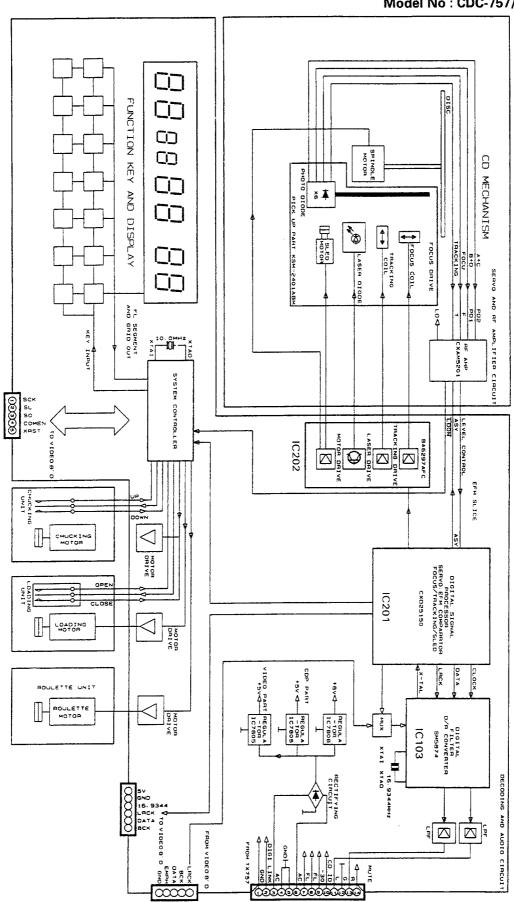
Unit must work properly and correctly at the temperature range from 32°F (0°C)to 113°F (45°C) and the relative humidity from 40% to 80%, and with the supply voltage.

#### Storage

Temperature test: 48 hours each at -40°F (-40°C) and 149°F (65°C). Humidity test: 40°C 95% relative humidity.

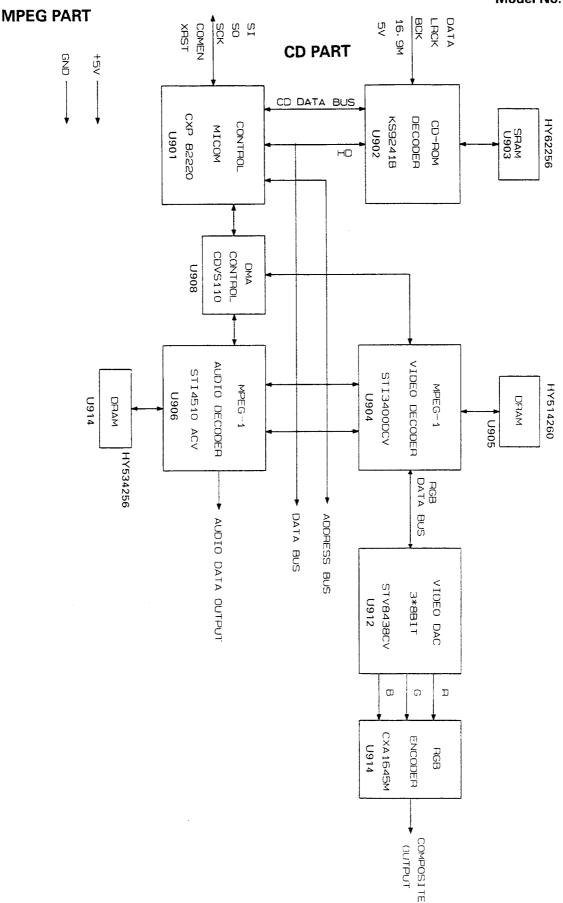
## **BLOCK DIAGRAM I**

Model No: CDC-757/VCDC-757



## **BLOCK DIAGRAM II**

Model No.: VCDC-757



## LASER BEAM SATETY PTECATIONS

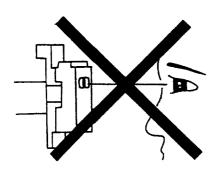
### CLASS 1 LASER PRODUCT

CLASS 1 LASER PRODUCT

#### CAUTION

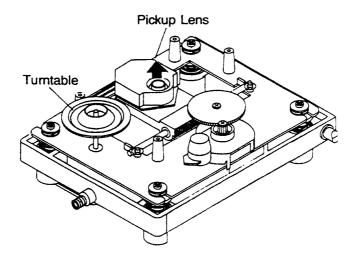
Invisible laser radiation when the unit is open. DO not stare into beam.

CAUTION: USE OF ANY CONTROLS, ADJUSTMENT, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



Do not look directly at the laser beam coming from the pickup or allow it to strike against your skin.

This compact disc player uses a pickup that emits a laser beam. The laser beam is emitted from the location shown in the figure. When checking the laser diode, be sure to keep your eyes at least 1 foot away from the pickup lens when the diode is turned on. Do not look directly at the laser beam.



### **CAUTION:**

Using controls and adjustment, or doing procedures other than those specified herein, may result in hazardous radiation exposure.

## SAFETY PRECAUTIONS



CAUTION: TO REDUCE THE RISK
OF ELECTRIC SHOCK, DO NOT
REMOVE COVER (OR BACK).
NO USER-SERVICEABLE
PARTS INSIDE. REFER SERVICING
TO QUALIFIED SERVICE
PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be

fully inserted to prevent blade exposure.

Attention: Pour prévenir les chocs électriques ne pas utiliser cetre fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames prévent être insérées à fond sans en laisser aucune partie à découvert.

## **WARNING**

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

### HANDLING LASER PICKUP

The laser diode in the optical system of this player can be damaged by electrostatic discharge from your clothes or your body. Proper electrostatic grounding for service personal is required during servicing.

### BEFORE REPAIRING THE COMPACT DISC PLAYER

#### Preparation

- Human Body Grounding:
   Many of the components used in this compact disc player, including the laser pickup, are sensitive to electrostatic discharge. Service personal should be grounded with an electrostatic armband (1 Mohm).
- Caution:
   Static charge on clothing does not escape through a body grounding wrist band.

   Be careful not to contact the pickup or electrical components with your clothing.
- Workbench and Tool Grounding:
   A properly-grounded electroconductive plate (1 Mohm) or metal sheet should be fitted to the workbench surface. Tools and instruments (such as soldering irons and scopes) should be grounded to prevent AC leakage.



Grounded Conductive
Wrist for Body

1 MΩ

Conductive Sheet or Copper Plate

Fig. 1

Incorrect

Fig. 2

**Note:** Laser diodes are so susceptible to damage from static electricity that, even if a static discharge does not ruin a diode, it can shorten its life or cause it to work improperly.

## PICKUP REPLACEMENT

### Caution:

Laser diodes are extremely susceptible to damage from static electricity. Even if a static discharge does not ruin the diode, it can shorten its life or cause it to work improperly. When replacing the pickup, take appropriate measures, such as using a conductive mat and a grounded soldering iron, to protect the laser diode from static damage.

1. Remove the CD mechanism assembly by referring to the "EXPLODED VIEW II" on page 72 (See Fig. 3).

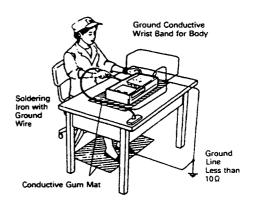
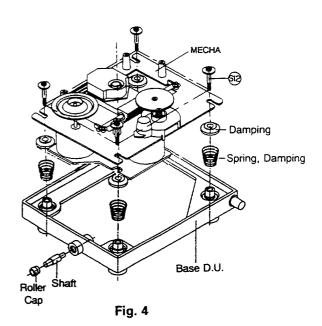


Fig. 3

2. Remove four screws S12 (See Fig. 4).



- 3. Remove the gear A (See Fig. 5).
- 4. Pull out the slide shaft.

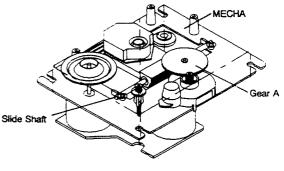


Fig. 5

5. Remove the pickup (See Fig. 6).

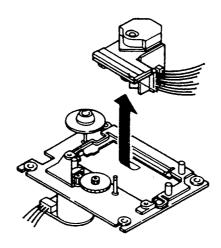


Fig. 6

6. Refer to the EXPLODED VIEW II of the compact disc mechanism on page 72 for detailed illustrations.

## **OPERATION CHECK**

When the power switch is turned on after the chucking arm is removed, observe the objective lens and check the following. (The optical system block should be at the lead-in position when it is checked.)

- 1. The disc table should be at the innermost position after the chucking arm is removed.
- 2. The diffused light of the laser beam can be seen when the power switch is turned on.
- 3. Vertical (up and down) movement of the objective lens takes place (2 or 3 times).

## **DISASSEMBLY PROCEDURES**

#### REFER TO PAGES 71 AND 82.

- 1 COVER TOP REMOVAL
  Remove 5 screws a and then remove the
  Cover Top .
- 2 FRONT PANEL ASSEMBLY REMOVAL
  - 1. Remove the Cover Top ①, referring to the previous step 1
  - 2. Remove 8 screws 6.
  - 3. Disconnect (CP401) from Front1 P.C.Board (PCB4) and then remove the Front Panel Assembly (AA).
- REMOVAL (PCB4, PCB5)
  - 1. Remove the Cover Top •, referring to the previous step 1.
  - 2. Remove the Front Panel Assembly (AA), referring to the previous step 2.
  - 3. Remove 6 screws **⊙** and then remove the Front1, 2 P.C.Board (PCB4, PCB5).
- 4 ASSEMBLY MECHANISM REMOVAL
  - 1. Remove the Cover Top , referring to the previous step 1.
  - 2. Remove the Front Panel Assembly (AA), referring to the previous step [2].
  - 3. Remove 4 screws 6.
  - Disconnect (CP301) from CNT P.C.Board (PCB3) and then remove the Assembly Mechanism 

     Mechanism
     Mechanism
- 5 DSP P.C.BOARD (PCB2) REMOVAL
  - 1. Remove the Cover Top •, referring to the previous step 1.
  - 2. Do steps 2 and 4.
  - 3. Remove the card cable from wafer (CP203 and CP202) on the DSP P.C.Board (PCB2)
  - Disconnect (CP201) from the DSP P.C.Board (PCB2).
  - 5. Remove 3 screws **and then remove the** DSP P.C.Board (PCB2).
- 6 MAIN P.C.BOARD (PCB1) REMOVAL
  - Remove the Cover Top n referring to the previous step 1.
  - 2. Do steps 2 and 4.
  - 3. Remove 3 screws and then remove the 2 taps (attached to the Main P.C.Board)

- from the body mechanism.
- 4. Remove the card cable from wafer (CP109) on the Main P.C.Board (PCB1).
- Disconnect (CP102, CP101, CN106 and CP103) from the Main P.C.Board (PCB1).
- Disconnect (CP901, CP902, CP903 and CP904) from the MPEG P.C.Board (PCB7). (This step is applicable for only VCDC757)
- 7 MPEG P.C.BOARD (PCB7) REMOVAL

(This step is applicable for only VCDC757)

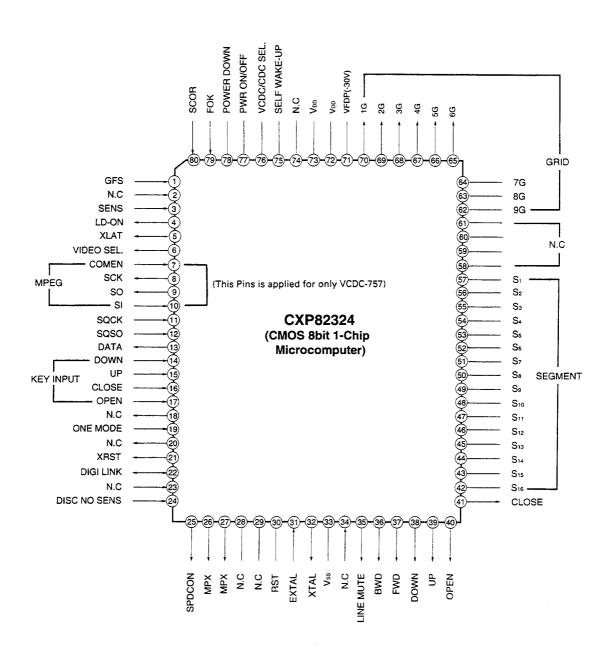
- 1. Remove the Cover Top •, referring to the previous step 1.
- 2. Do steps 2 and 4.
- 3. Disconnect (CP901, CP902, CP903 and CP904) from the MPEG P.C.Board (PCB7)
- 4. Remove 3 screws **(9)** and then remove the MPEG P.C.Board (PCB7).
- 8 VIDEO JACK P.C.BOARD (PCB6) REMOVAL (This step is applicable for only VCDC757)
  - 1. Remove the Cover Top , referring to the previous step 1.
  - 2. Disconnect (CP601) from the MPEG P.C.Board (PCB7).
  - 3. Remove a screw **a** and then remove the Video Jack P.C.Board (PCB6).
- 9 CNT P.C.BOARD (PCB3) REMOVAL
  - 1. Remove the Cover Top ①, referring to the previous step 1.
  - Disconnect (CP301) from the CNT P.C.Board (PCB3).
  - 3. Remove 2 screws 
    and then remove the CNT P.C.Board (PCB3).

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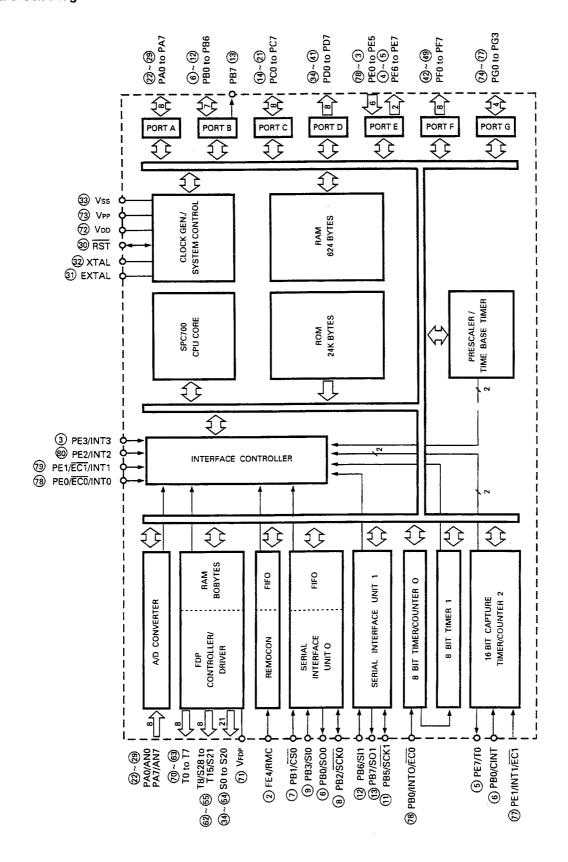
## **CIRCUIT DESCRIPTION**

## 1. IC201: CXP82324 (CMOS 8bit 1-Chip Microcomputer)

## 1-1. Pin Connection Diagram



## 1-2. Block Diagram



# 1-3. Input and Output Terminal Functions

Pin No.	Symbol	Description		
1	GFS	GFS signal input from CXD2515Q.		
2	NC	Not used !		
3	SENS	Sense signal output to pick-up unit (M-101).		
4	LD-ON	LD-on signal output to pick-up unit (M-101).		
5	XLAT	Serial latch data output to CXD2515Q.		
6	VIDEO SEL	Output for controlling audio signal to 74HC157.		
		If video CD, then "H" and if normal CD, then "L".		
7	COMEN (MPEG)	Input for checking data transmission to MPEG CPU.		
8	SCK (MPEG)	Clock data output to MPEG CPU.		
9	SO (MPEG)	Serial data output to MPEG CPU.		
10	SI (MPEG)	Serial data input from MPEG CPU.		
11	SQCK	Clock data input for subcode-Q readout to CXD2515Q.		
12	SQSO	Subcode-Q signal input from CXD2515Q.		
13	DATA	Serial data output to CXD2515Q.		
14~17	KEY INPUT	Data input for key scan.		
	NC NC	Not used !		
18	ONE MODE			
19	NC NC	Input for test mode for production.  Not used !		
20	XRST	Output for resetting CXD2515Q. (At "L", it is active)		
21	DIGI-LINK	Input for remocon data.		
22		Not used !		
23	NC DISC NO SENS	Roulette sensor data input from mecha.		
24	DISC NO SENS	Output for roulette motor to stop the disc roulette.		
25	SPDCON	According to settings, each MPX mode operates as follows.		
	LADY OF	According to Settings, each wit A mode operates as follows:		
26, 27	MPX SEL	Pin No. Signal Output		
		26 27 L-CH. R-CH.		
		"L" "H" L-CH. L-CH.		
		"H" "L" R-CH. R-CH.		
		"H" "H" L+R-CH. L+R-CH.		
		"L" L-CH. L-CH.		
28, 29	NC	Not used !		
30	RST	Input for resetting CPU. (At "L", it is active)		
31	EXTAL	Input of 10.0 MHz oscillator crystal.		
32	XTAL	Output of 10.0 MHz oscillator crystal.		
33	Vss	Ground		
34	NC	Not used !		
35	LINE MUTE	Output for audio mute. (At "H", it is active)		
36	ROULETTE BWD(-)	Output for driving motor to rotate counter clockwise the roulette.		
37	ROULETTE FWD(+)	Output for driving motor to rotate counter clockwise the roulette.		
38	PICK-UP DOWN	Output for chucking motor to draw down the pick-up.		
39	PICK-UP UP	Output for chucking motor to draw up the pick-up.		
40	TRAY OPEN	Output for driving motor to open the tray. (At "H", it is active)		
41	TRAY CLOSE	Output for driving motor to close the tray. (At "H", it is active)		
42~57	SEGMENT	Segment signal output for FIP.		
58~61	NC_	Not used !		
62~70	GRID	Grid signal output of for FIP.		
71	V <sub>FDP</sub>	-30 V power supply for FIP controller.		
72, 73	Vdd	+5 V power supply for CPU.		
74	NC	Not used !		
75	SELF WAKE-UP	Input for waking up CPU.		
76	VCDC/CDC SEL	Input for selecting VCDC-757 or CDC-757.		
	!	If "H", then VCDC-757 and if "L", then CDC-757.		
77	PWR ON/OFF	Output for power off when function changed. (At "L", it is active)		
78	POWER DOWN	Input for detecting power-down. (At "L", it is active)		
79	FOK	FOK signal input from CXD2515Q.		
80	SCOR	GFS signal input from CXD2515Q.		

### 2. APC CIRCUIT

A semiconductor laser is used as the light source for the optical pickup. As the laser diode has large negative temperature characteristics in its optical output when driven with a constant current, a circuit must be provided to stabilize this output. For this purpose, a monitor diode which detects the optical output of the laser diode is used in the semiconductor laser.

As the laser diode emits light from its bonded surface, light is emitted both in front and behind. The light emitted behind is monitored with the monitor diode installed on its rear surface, and the optical output is thus controlled. The light emitted in front becomes the light source for the pickup.

### Fig. 7 shows the APC circuit.

When the temperature rises and the optical output decreases, the monitor diode current (ls) decreases, the electric potential of OE-IC pin 24 rises, the base current of the driving transistor increases, and the laser diode current increases. This causes the reduced optical output to return to its former level.

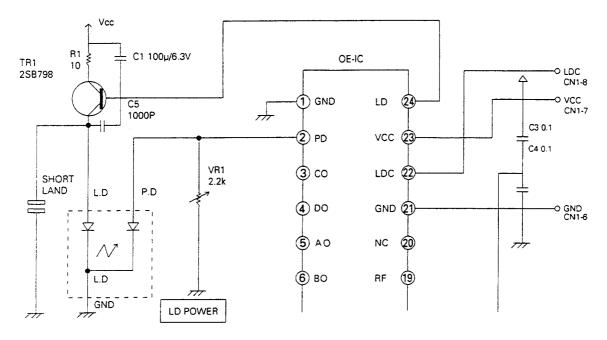


Fig. 7

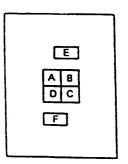
### 3. FOCUS SERVO

#### 3-1. Optical pickup

This set employs a three-beam optical pickup comprised of six division photodiodes, A through F as shown in Fig. 8. The four photo diodes (A through D) at the center provide focus error detection by using their property to allow the beam to focus into a round image only at a certain point.

The sums of outputs from diagonal two elements of four division photo diodes (A+C and B+D) are compared by the differential amplifier in OE-IC to detect the shape of the beam image.

The remaining two diodes (E and F) provide tracking error detection by means of sub-beam spots.



Three spotted (six-division) photo diodes

Fig. 8

### 3-2. Focus error detecting operation

Fig. 9 shows the reflected laser beam from a disc is polarized 90° with the beam-splitter and sent to the cylindrical lens. The beam passed through this cylindrical lens is then sent to the four division photo diodes and focuses into an image whose shape varies with the distance between the disc and the objective lens. Such change in the beam shape causes the current flowing from the photo diodes to vary.

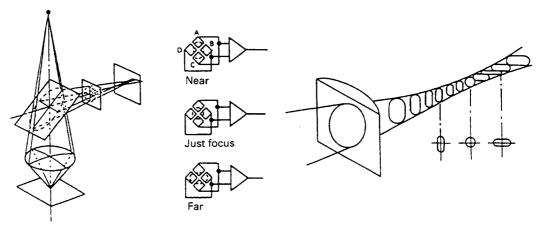


Fig. 9

### 3-3. Tracking error detection system

Fig. 10 shows the principle of the tracking error detection system which employs the three beam system.

The laser beam is divided into the main beam and two sub-beams by diffraction grating and they are arranged on one line. The center line connecting these three beams has a slight offset angle against the main beam. The main beam is received by photo diodes A, B, C and D and two sub-beams by E and F respectively.

Fig. 10-A shows the on-track state. As both auxiliary beams 1 and 2 are slightly on the track in this state, the outputs of photo diodes E and F are equal and the tracking signal is 0(zero). When the track is shifted to the left (Fig. 10-B), the auxiliary beam 1 is off the pit. This allows more light to be received by the photo diode E, resulting in positive (+) tracking signal output. On the other hand, when the track is shifted to the right (Fig. 10-C), the amount of light received by the photo diode F increases, resulting in negative (-) tracking signal output. And these extreme signals are detected as tracking error signals.

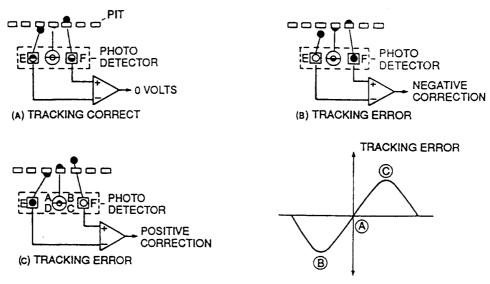


Fig. 10

## **TROBLESHOOTING**

▷ Check CP302. ▷ Check CP106. Check CP106. 
 Check J185. Check the circuit around it. Check the amplifier part. Check the circuit Tuner. > X-TAL102 is defective. | IC103 is defective. ▷ IC101 is defective.▷ X101 is defective. D119 is defective. ► |> IC101 is defective. ► IC108 is defective. Check CP301 جوار 2 9 9 õ 9 ŝ Check the circuit around for cold solder joints. At pins72, 73 of IC101 are +5V ? 62, 71 of IC101 is wavefrom as appear at pins31, 32 of IC101.2 Does 16 MHz clock pulse appear at pin3 of IC103? Does 10 MHz clock pulse Are +/-8V lines normal? Are -30V lines normal? At IC101 pins 42, 57, Is +5V line normal? YES YES YES YES YES YES Fig. 11? > FL display is defective. 2 9 9 9 Load CD and press "OPEN/CLOSE" information indicators displayed Are total track number and and closed normally? play time displayed ? Is there audio signal at output terminals? Are "No disc" and disc Press "PLAY" button. Set power switch ON. Can tray be opened button repeatedly. on FL display? YES YES YES YES YES ş

[Repair item 1] At power on, "0" and some parts are not displayed.

[Repair item 3] "0" is displayed instead of total playing time and track number. 3-B 3-C 3-D 9 2 9 9 Does lens move up and down Does spindle motor rotate? Does sled motor move? Does laser emit? Check the CD. YES YES YES YES ▷ Check· Circuit around pin7 and pin10 of · Wire connector from CP103-1. IC101.

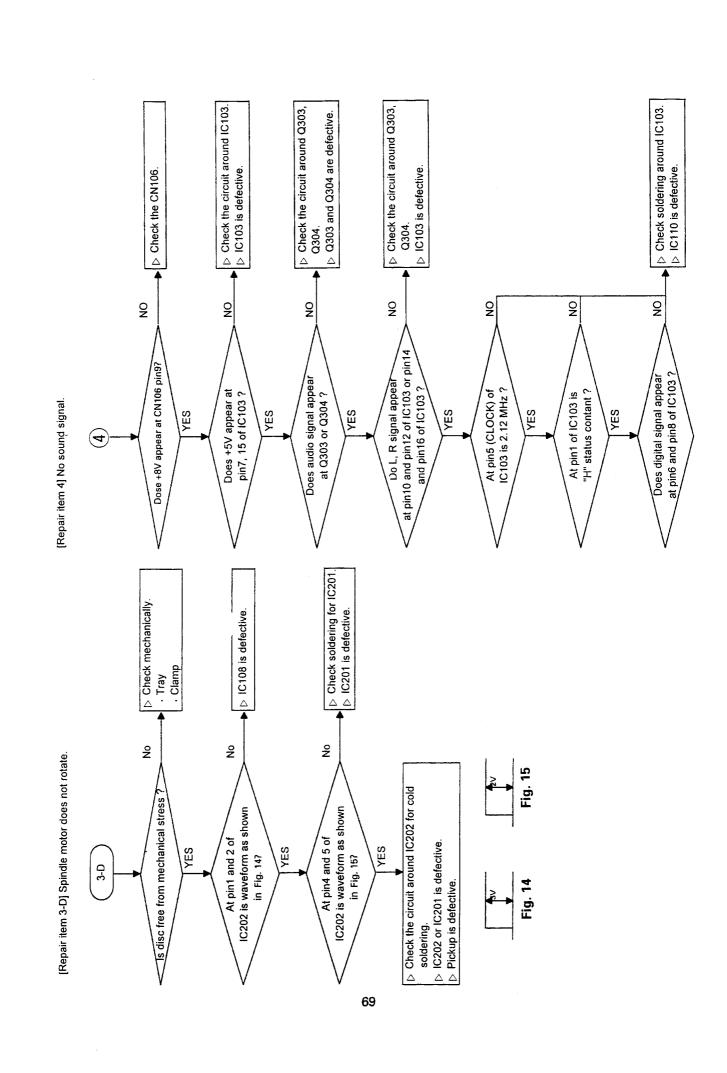
Cold solder joints. · Circuit IC101 for cold solder joints. 9 ▷ Check
 Tray motor and mecha wire.
 • Wire connector from CP103. · Wire connector from CP103. ▷ Check the CP301, CP302. frepair item 2] Tray cannot be opened and closed by pressing "OPEN/CLOSE" button. ○ Check the CP106. CheckFront PCB does it move in again After tray moves out, automatically? YES ▷ Check leaf switch of loading motor. 9 9 9 욷 Press "OPEN/CLOSE" button and move out again automatically 2 Does +8V appear at J181? Does +8V appear at emitter After tray moves in, does it Is pin40 or pin41 of IC101 "H" status ? check the following. of Q106, Q107? YES YES YES

3575 - 1

> XT102 is defective. ▷ Check IC103 pin3.▷ IC103 is defective. 2 Ts level of IC201 pin8 and pin10 0V? □ Check IC202 pin10, 11, and 12. Check circuit around IC201 and cold YES clock pulse appear at pin62 of IC201? Does 16.9344 MHz YES 8 9 IC201 is defective. Check wire and connector of CP202. soldering. Is wavefrom at pin9 of CP202 as in Fig. 137 YES 3-C Pick-up is defective. Fig. 13 > Check the circuit around IC202 and Check the circuit around IC201 and ♦ ▷ Pick-up is defective. Fig. 12 IC101 is defective. Laser ON IC201 is defective. IC202 is defective. cold soldering. cold soldering. \$ ≥ 8 2 9 9 2 Are pin23 and pin24 of IC202 3.6V Check wire and connector of CP202 Are pin26 and 27 of IC109 3.6V? At pin4 of IC101 is "H" status At R229 is wavefrom as show Repair item 3-B] Laser does not emit. Is pin2 of IC201 2.1V ? YES YES YES YES YES constant 2 Wire connector of CP201. Fig. 12? э. В 3-A and cold soldering. · Sled motor. Check

[Repair item 3-A] Sled motor dose not move.

[Repair item 3-C] Object lens of pickup unit does not move up and down.



## **MECHANICAL PARTS LIST**

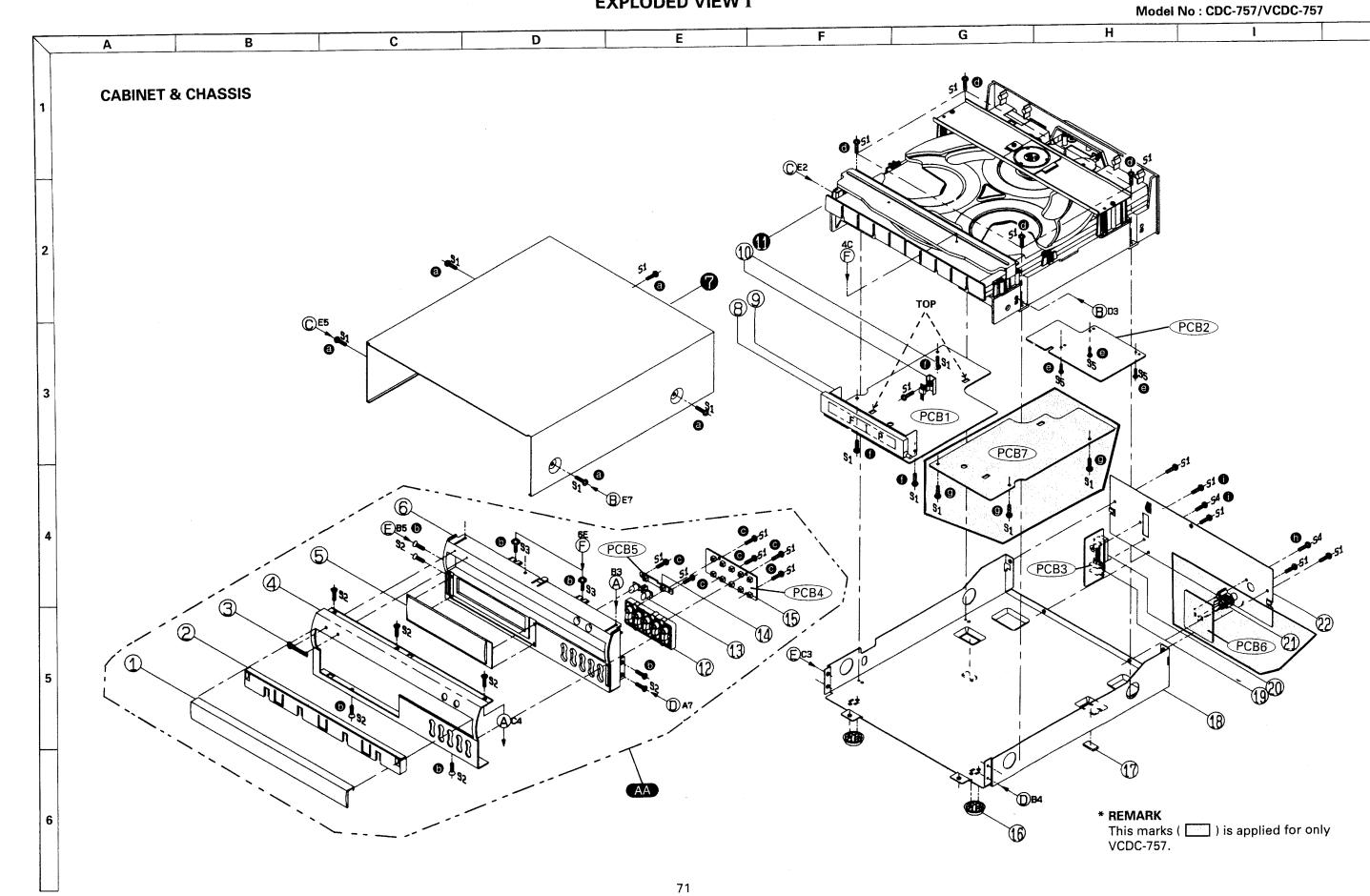
Ref. No.	Description	Parts No. Q'ty Version	
	PACKAGE		_
	Carton Box	049605258410 1 KS	_
	Carton Box Cushion Poly	049605258403 1 A,D,PT IND 9722041310 1	U
	Film Soft PE	9715000120 1	
	ACCESSORIES	4000004040 4 1/0	
	Cord Patch, 1P Demo Disc, Video CD	4328201910 1 KS 5058001210 1 KS	
	Demo Disc, video Co	3036001210 1 K3	
	CABINET & CHASSIS		
1	Door (CDC757)	048663001412 1	
(1) 2	Door (VCDC757)	048663001411 1 KS	
3	Base Door Badge, INKEL	6043010510 1 048535045411 1 KS	
(3)	Badge, SHERWOOD	048535045421 1 A,D,PT IND	0
4	Panel Front (CDC757)	048602019912 1	
(4)	Panel Front (VCDC757)	048602019911 1 KS	
5 6	Window Body Front	8553023510 1 048521009811 1	
7	Cover Top	046123017911 1	
8	FIP, 9CEM6	2328130322 1	
9	Shield Fence	6163115610 1	
10 11	Heatsink Assembly Mechanism	7505202410 1 5728000840 1	
12	Button Function	048543070211 1	
13	Button Skip	048543070311 1	
14	Switch Tact	4658004410 2	
15	Switch Tact	4658003710 10	
16 17	Foot Rubber Foot	6035104310 2 6715021230 2	
18	Chassis Main	6121615010 1	
19	Plate Ground	6165143510 1	
	Connector, System	4428513820 1	
21 22	Jack RCA	4438113810 1 '046102045111 1 KS	
(22)	Chassis Back (VCDC757) Chassis Back (CDC757)	'046102045111 1 KS	
(22)	Chassis Back	'046102045221 1 A	
(22)	Chassis Back	'046102045251 1 D	
(22)	Chassis Back	'046102045291 1 PT INDO	
\$1 (\$1) \$2 \$3 \$4 (\$4)	HARDWARE KIT Screw, #B BTT 3x8B (VCDC757) Screw, #B BTT 3x8B (CDC757) Screw, #2 FTC 3x10B Screw, #B WTT 3x8Y Screw Gurond, 3x10B (VCDC757) Screw Gurond, 3x10B (CDC757)	8179130083 27 KS 8179130083 24 8129230083 9 8179230061 2 8155000710 2 KS 8155000710 1	
\$5 <sup>′</sup>	Screw, #2 BTC 2.6x8B MISCELLANEOUS	8109260083 3	
	Connector, Lead Ass'y, 6P, 80mm Connector, Lead Ass'y, 14P, 420mm Card Cable, 12P	435206082042 1 435214422022 1 4118512100 1	
	Card Cable, 19P	4118619085 1	
PCB1	P.C.Board Main	4004000700 1	
PCB2 PCB3	P.C.Board DSP P.C.Board CNT	4004000710 1 4004000730 1	
PCB4	P.C.Board Front 1	4004000720 1	
PCB5	P.C.Board Front 2	4004000750 1	
PCB6 (PCB6)	P.C.Board Video Jack (VCDC757)	4004000740 1 KS	
PCB7	Not Used ! (CDC757) P.C.Board MPEG (VCDC757)	A,D,PT INDC 4009000100 1 KS	'
(PCB7)	Not Used ! (CDC757)	A,D,PT INDO	
<b>11</b>	ASSEMBLY MECHANISM (ICM02D) Gear Center	<b>5728000840</b> 7105000410 2	
2	Gear Pulley	7105000510 1	
3	Gear Roulette	7105000610 1	
4 5	Gear Motor Gear Worm	7105000710 1	
6	Bracket Side	7105000810 1 6505133510 4	
7	Chuck Chassis	6023408710 1	
•	Bracket Motor	6023801010 1	
	Frame Front Guide Chuck	6023601320 1	
	Guide Chuck Gear Loading	6063103110 1 7103001910 1	
12	Base D.U	6062101520 1	
13	Cam Gear	7142000510 1	
	Cover Cam Rouitte	7142000610 1	
	Roulte Tray Roulette	7121400320 1 6021800410 1	
17	Body Mecha	6021601310 .1	
	Rubber Limit	6715022810 2	
	Rubber Bracket Shaft Gear Roulette	6715023310 3 7005007910 1	
21 (	Cover Roulette	7005007910 1 6735011410 1	
	Sheet Tray	6705022510 1	

Ref. No.	Description	Parts No.	Q'ty	Version
23	Sheet Tapping	6725003610	1	
24	Belt Loading	7165002510	1	
25	P.C.Board Sensor	4009500500	1	
26	Base Magnet	6063103010	1	
27	Cover Magnet	6023408610	1	
28	Magnet	5125000910	1	
29	Pulley Motor	7113001310	1	
30	Rubber Damping	6715024510	4	
31	Spring Damping	6555014010	4	
32	Poly Washer ( © 2.1)	8338300710	1	
33	Poly Washer ( © 4.1)	8338301310	1	
34	Poly Washer ( ¢ 5.2)	8338301410	1	
35	Poly Washer ( © 3.1)	8338301210	1	
36	Screw Mecha	8155001210	3	
37	Screw Damping	8155001610	4	
38	Screw BM 2x3Y	8009120031	2	
39	Screw BM 2.6x4Y	8009126041	. 4	
40	Screw #1 WPT 2.6x8Y	8159126081	2	
41	Screw #1 BT 2.6x8Y	8109126080	2	
42	Screw #1 BT 3x8Y	8109130081	3	
43	Screw #1 BT 3x10B	8109130101	6	
44	Screw #1 WPT 3x15Y	8159130151	1	
45	Screw BTTS 3x4Y	8109430051	1	
46	Connector, Lead Ass'y, 5P	436105080121	1	
47	Connector, Lead Ass'y, 5P.	436105080121	1	
48	Connector, Wafer, 5P	5798100307	1	
49	Connector, Lead Ass'y, 2P	436202070132	1	
50	Connector, Wafer, 2P		1	
51	Resistor, 150 ahm, 1/5 W, J	3069151970	1	
52	Resistor, 10 kohm, 1/5 W, J	3069103970	1	
53	Drive Unit, KSM-2401ABM)	5728001110	1	
54	Motor, RF-500TB-12560	5558001810	1	
55	Motor, FF-130SH-14230	5558200410	1	
56	Switch Lever, SSCF-21004A	4638003410	2	
57	Photo Sensor, SG-23F1	78001111	†	

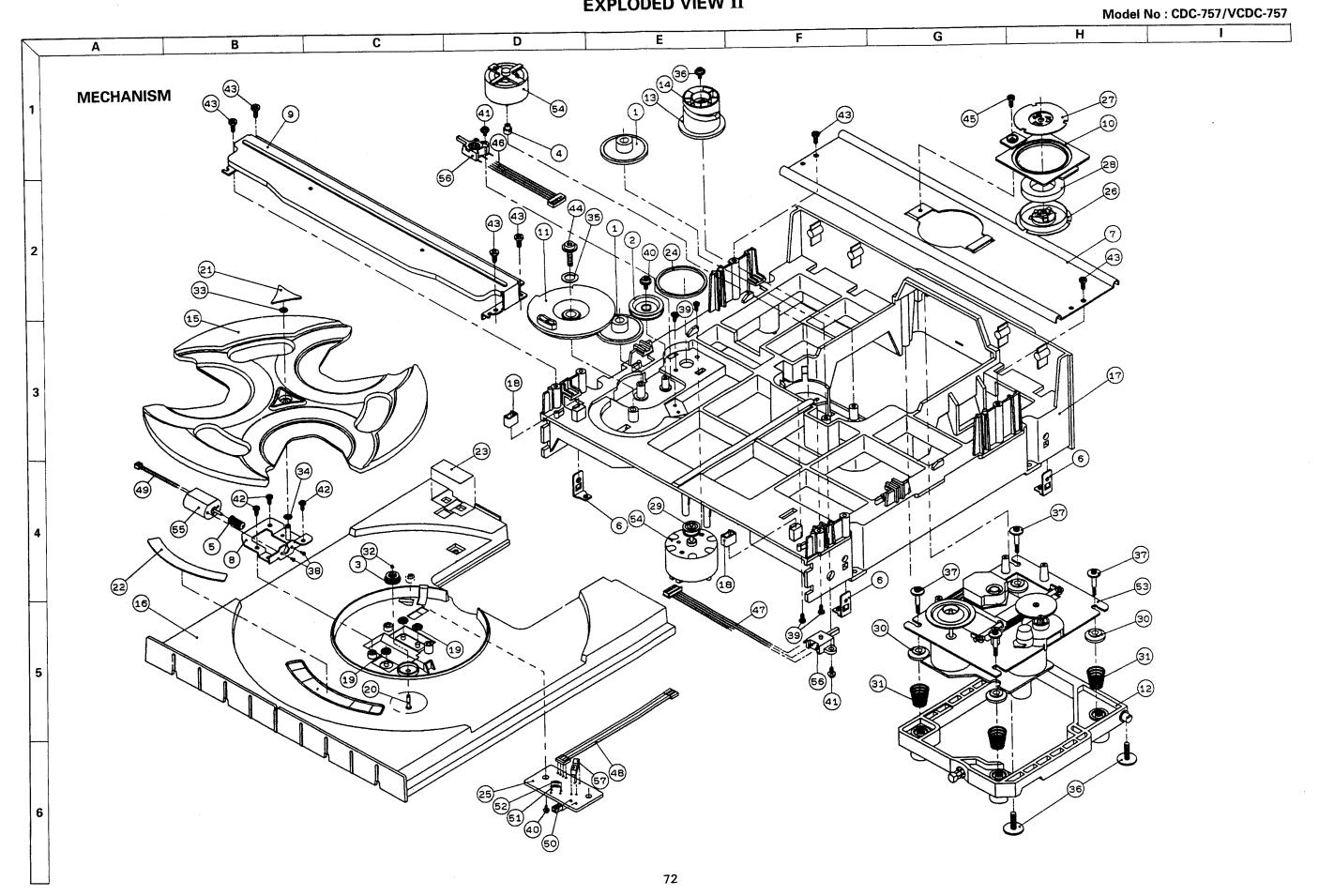
#### PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol A in the parts list are of special significance to safety. When replacing a component identified with A , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

## **EXPLODED VIEW I**

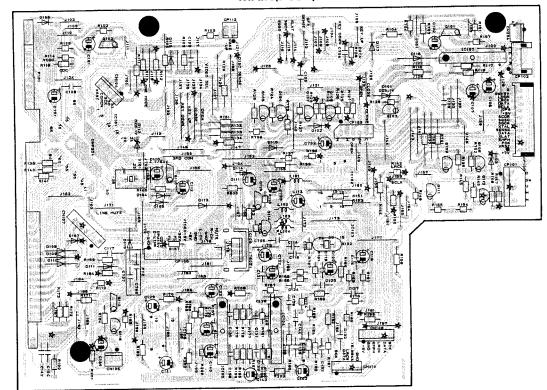


## **EXPLODED VIEW II**



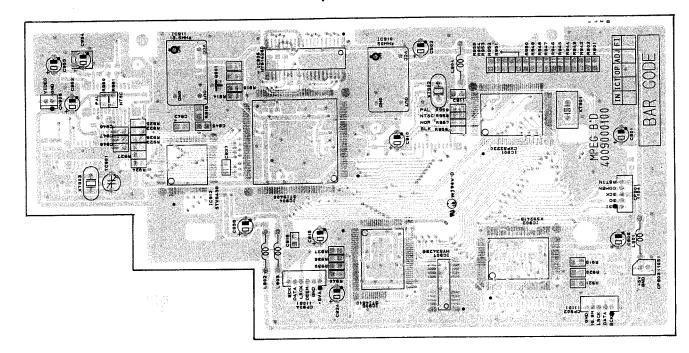
# PRINTED CIRCUIT BOARDS

MAIN(PCB1)

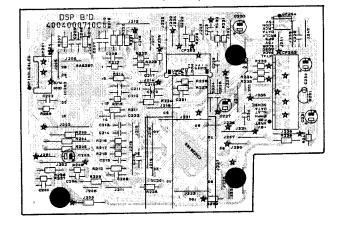


MPEG(PCB7): VCDC757 ONLY

## - Top View -

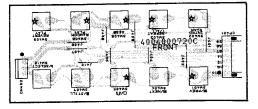


DSP(PCB2)

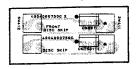


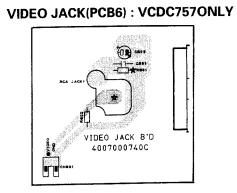
CNT(PCB3)

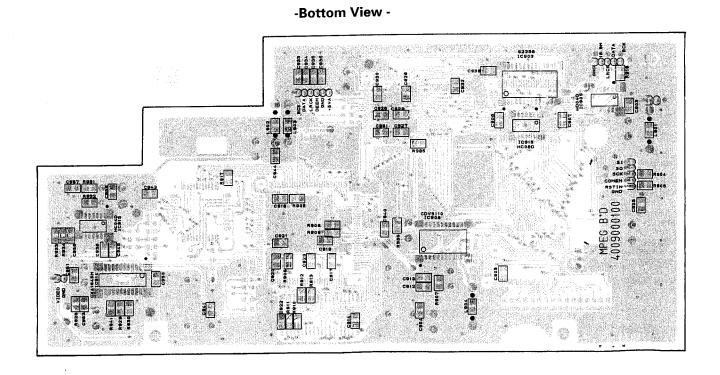
FRONT 1(PCB4)



FRONT 2(PCB5)







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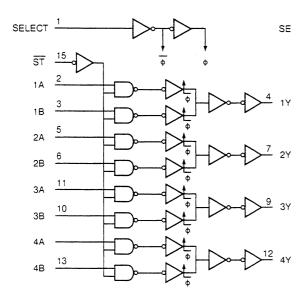
## **ELECTRICAL PARTS LIST**

								Ref. No.	Description		Parts No. Q'ty Version	n Ref. No.	Description			Parts No.	Q'ty Version
RODU	CT SAFETY NOTICE : P	roducts marked wit	th 🛆 have special	I characteristics in	nportant to safety.	i this manual		9	Shield Fence		6163115610 1	PCB5	ASSEMBLY PCB FRONT 2				
	11	you replace any of	f these componen	its, read carefully t	the product safety noti	ce in this manual.		10	Heatsink		7505202410 1	CN501	Connector, Lead Ass'y, 3P, 120r	mm		436103112632 4658004410	
		on't degrade the sa	afety of the produ	ict through improf	per servicing.							14	Switch Tact			4050004410	2
	F	esistor/Capacitor to	olerance – D : ( $\pm 0$	).5%), J : (±5%), K	(:(±10%), M:(±20%)	, Z : +80, – 20%)		PCB2	ASSEMBLY P.C.BOARD	DSP		PCB6	ASSEMBLY PCB VIDEO JACK				984C
								STAME TO SHEET	CAPACITORS		1 0540004005 4	C601	Capacitor, CeramicTubular	0.1 u			
			Donto No. Of	to Varrian Daf No.	Description		Parts No. Q'ty Version	C201	CeramicTubular	680 pF 50 V 0.002 uF 50 V		C602	Capacitor, Electrolytic SG Connector, Wafer, 2P	22 u	F 16 V M	4428525520	
Ref. No		A CONTRACTOR OF THE PROPERTY O		ty Version Ref. No.	Carbon Film	3.3 kohm 1/5 W J	3069332970 1	- C202 C203	CeramicTubular Electrolytic SG	470 uF 10 V		CN601 R601	Resistor, Metal Film	10 oh	nm 1/5 W J		
PCB1	ASSEMBLY P.C.BOARD CAPACITORS	MAIN		R102 R103	Carbon Film	100 kohm 1/5 W J	3069104970 1	C203	CeramicTubular	680 pF 50 V	J 3519681935 1	21	Jack RCA			4438113810	<i>i</i> 1
C101	Electrolytic SG	4.7 uF 50 V	/ M 3479347971 1	1 R104	Carbon Film	10 kohm 1/5 W J	3069103970 1	C205/C206	6 CeramicTubular	0.022 uF 50 V							
C102	Electrolytic SG	100 uF 10 V		1 R105	Carbon Film	100 kohm 1/5 W J 1 kohm 1/5 W J	3069104970 1 3029102970 1	C207	CeramicTubular	0.1 uF 50 V 0.0022 uF 50 V	Z 3519104935 1 Z 3519222935 1	PCB7	ASSEMBLY PCB MPEG (VCDC	2757 ONL	. <b>Y</b> )		40%
C103	Ceramic Tubular	1000 pF 50 V		R106	Metal Film	1.2 kohm 1/5 W J	3069122970 1	C208 C210/C21	CeramicTubular 1 CeramicTubular	0.0022 ur 50 V		MAMILLAND	CAPACITORS				
C105	Ceramic Tubular	220 pF 50 V 100 uF 10 V	·	1 R107 2 R108	Carbon Film Carbon Film	47 kohm 1/5 W J	3069473970 1	C210/C21	CeramicTubular	680 pF 50 V	J 3519681935 1		2 Electrolytic SG 10				
	C107 Electrolytic SG C109 Ceramic Tubular	0.1 uF 50 V			Carbon Film	10 kohm 1/5 W J	3069103970 1	C214	Mylar	0.0015 uF 100 V	J 3679152120 1		5 Ceramic Chip 0.1	1 u	F 50 V J	3369104339	3
C108/C	Electrolytic SG	3,3 uF 50 \	· · · · · · · · · · · · · · · · · · ·		Carbon Film	2.2 ohm 1/5 W J	3069229970 1	C216	CeramicTubular	0.01 uF 50 V	J 3519103935 1 J 3519471935 1	C906	Not Used! 9 Ceramic Chip 0.7	1 1	F 50 V J	3589104539	3 3
C111	Electrolytic SG	2.2 uF 50 \			3 Carbon Film	68 kohm 1/5 W J 100 kohm 1/5 W J	3069683970 3 3069104970 1	C217	CeramicTubular	470 pF 50 V 0.1 uF 50 V	Z 3519104935 1	C907-C90	Not Used!	_			1
C113/0		100 uF 10\		2 R114 1 R115	Carbon Film Carbon Film	68 kohm 1/5 W J	3069683970 1	C219 C220	CeramicTubular CeramicTubular	100 pF 50 V		C911	Ceramic Chip 0.1		ıF 50 V J		
C115	Ceramic Tubular	0.022 pF 50 \ 100 uF 10 \		1 R116	Carbon Film	100 kohm 1/5 W J	3069104970 1	C221	CeramicTubular	0.01 uF 50 V	J 3519103935 1	C912/C91				3589150139 3589104539	
C116	Electrolytic SG Ceramic Tubular	220 pF 50 \		1 R117	Metal Film	1 ohm 1/5 W J	3029109970 1	C222	CeramicTubular	0.1 uF 50 V	-	C914	Ceramic Chip 0.1	1 u	1F 20 V J	3369104333	, 1
C118	Ceramic Disc, CH	33 pF 50 \		1 R118	Carbon Film	4.7 kohm 1/5 W J	3069472970 1	C223	CeramicTubular	470 pF 50 V 0.022 uF 50 V		C915	Not Used! 3 Ceramic Chip 0.	1 L	ıF 50 ∨ J	3589104539	∌ 8
C119	Ceramic Tubular	0.022 pF 50 \		1 R119	Carbon Film	3.3 kohm 1/5 W J 100 ohm 1/5 W J	3069332970 1 3029101970 1	C224	CeramicTubular CeramicTubular	0.022 uF 50 V 0.047 uF 50 V			6 Not Used!				
C120	Electrolytic SG		V M 3479310121 1 V J 3519223935 1	1 R120 1 R121	Metal Film Metal Film	33 ohm 1/5 W J	3029330970 1	C225 C226/C22		0.022 uF 50 V			2 Ceramic Chip 0.	1	F 50 V J	3589104539	3 6
C121	Ceramic Tubular C123 Electrolytic SG		V M 3479310121		3 Metal Film	560 ohm 1/5 W J	3029561970 2	C230	Electrolytic SG	100 pF 10 V			6 Not Used!		ıF 50 √ J	3589104539	a 2
	C128 Ceramic Tubular	120 pF 50 V			Metal Film	1 kohm 1/5 W J	3029102970 1	C231	Electrolytic SG	3.3 uF 50 V			8 Ceramic Chip 0. Electrolytic SG 47		ıF 30 V 3	3479347121	
C129		10 uF 50		1 R125	Metal Film	56 ahm 1/5 W J	3029560970 1 3029222970 2	C232	CeramicTubular	0.1 uF 50 V	Z 3519104935 1	C939 C941-C95	Elocutory and the		F 50 V	3589104539	
C130	Ceramic Tubular	100 pF 50		1 R126/R12		2.2 kohm 1/5 W J 1 kohm 1/5 W J	3029222970 2		CONNECTORS			C952			ıF 10 <b>V</b>	3479347121	
C131	Mylar	0.001 uF 100 \ 120 pF 50 \		1 R128 1 R129	Metal Film Metal Film	270 ahm 1/5 W J	3029271970 1	CN109	Wafer, FPC, 19P		4428519826 1	C953	Ceramic Chip 0.		.F 50 V ⋅	3589104539	
C132	Ceramic Tubular		V M 3479310121	1 R130	Metal Film	1 kohm 1/5 W J	3029102970 1	CP201	Wafer, 6P		4428525560 1	C954	Electrolytic Chip		µF 16∨ µF 10∨ N	3478010031 3479347121	
C133 C134	Electrolytic SG Ceramic Tubular	120 pF 50		1 R131-R13	34 Carbon Film	47 kohm 1/5 W J	3069473970 4	CP202	Wafer, FPC, 12P		4428527170 1	C955	Electrolytic SG 47 Not Used !	70 ι	JF 10 V N	1 34/934/12	
C135	Electrolytic SG	1 uF 50		1 R135	Metal Film	1 kohm 1/5 W J 680 ohm 1/5 W J	3029102970 1 3029681970 1	CN201	Lead Ass'y, 6P		4358102184 1	C956 C957	Ceramic Chip, CH 27	7 1	oF 50 V 、	3539270210	ე 1
C136	Ceramic Tubular	120 pF 50		1 R136	Metal Film Metal Film	680 ohm 1/5 W J 1 kohm 1/5 W J	3029102970 1		INTEGRATED CIRCUITS	•		C958	Ceramic Chip, CH 39	9 i	oF 50 V .		
C137	Ceramic Tubular	100 pF 50 100 pF		1 R137 1 R138	Carbon Film	120 kohm 1/5 W J	3069124970 1	IC201	CXD2515Q	•	2138022116 1	TC901	Ceramic Chip 10		oF 50 V	3519100935	
C138		100 pF 50 0.001 uF 100		1 R139	Carbon Film	68 kohm 1/5 W J	3069683970 1	IC202	BA6297		2168027202 1	V924	Electrolytic SG 10	00 (	uF 10 V N	A 347931012	1 1
C139 C140		100 uF 10		1 R140/R14	11 Carbon Film	120 kohm 1/5 W J	3069124970 2						CONNECTORS				
C141	*	10 uF 50		1 R142	Metal Film	100 ohm 1/5 W J 330 ohm 1/5 W J	3029101970 1 3029331970 1		TRANSISTOR		2008610102 1	CP901	Wafer, 5P			4428516410	0 1
C142		0.1 uF 50		1 R143 1 R144	Metal Film Metal Film	220 ohm 1/5 W J	3029221970 1	Q201	2SD1302		2000010102	CP902	Wafer, 5P			4428516410	
C143	· · · · · · · · · · · · · · · · · · ·	100 uF 10 120 pF 50		1 R144	Metal Film	330 ohm 1/5 W J	3029331970 1		RESISTORS			CP903	Wafer, 2P			4428508210	
C144	Ceramic Tubular Electrolytic SG	120 pF 50 470 uF 10		1 R146	Carbon Film	100 kohm 1/5 W J	3069104970 1	R200	Carbon Film	22 kohm 1/5 W		CP904	Wafer, 6P			4428516510 43620220378	
C701		470 uF 10		1 R147/R14		33 ohm 1/5 W J	3029330970 2	R201	Carbon Film	68 kohm 1/5 W		CN905	Lead Ass'y, 2P, 200mm			400202200.0	-
C704	•	1000 pF 50	V J 3519102935		51 Metal Film	100 ohm 1/5 W J 750 ohm 1/5 W J	3029101970 3 3069751970 1	R202	Metal Film	100 ohm 1/5 W 22 kohm 1/5 W			RESISTORS				
				R152 R153	Carbon Film Metal Film	750 ohm 1/5 W J 100 ohm 1/5 W J	3029101970 1	R203	Carbon Film 06 Carbon Film	15 kohm 1/5 W	-	R901-R9	06 Chip 19	-	ohm 1/8 W	309910337	
(3) 	CONNECTORS		436205223782	1 R154/R15		2.2 kohm 1/5 W J	3029222970 2		08 Carbon Film	7.5 kohm 1/5 W	J 3069752970 2	R907	O1111P		ohm 1/8 W	J 309947487	
CN10			436101083167	1 R156	Carbon Film	47 kohm 1/5 W J	3069473970 1	R209	Carbon Film	15 kohm 1/5 W		R908/R9	Da Cliib		ohm 1/8 W ohm 1/8 W		
CN10		1	435214423822	1 R157	Carbon Film	10 kohm 1/5 W J	3069103970 1	R210	Carbon Film	7.5 kohm 1/5 W		R910-R9 R916-R9	10 01.11		hm 1/8 W	_	
CN10			436207183332	1 R158	Metal Film	330 ohm 1/5 W J 220 kohm 1/5 W J	3029331970 1 3069224970 1	R211	Carbon Film 14 Carbon Film	15 kohm 1/5 W 68 kohm 1/5 W		R925-R9	an one		hm 1/8 W		
CN10			436206083132 436205103132	1 R159	Carbon Film 63 Carbon Film	10 kohm 1/5 W J	3069103970 4	R213/R21 R215	Carbon Film	7.5 kohm 1/5 W		R928	Chip 4	•	ohm 1/8 W		
CN11			4428513450	1 R164	Carbon Film	22 kohm 1/5 W J	3069223970 1	R219	Metal Film	4.7 ohm 1/5 W		R929	Chip 1		ohm 1/8 W	·	
CP10			4428525550	1 R165/R16		33 kohm 1/5 W J	3069333970 2	R220	Carbon Film	22 kohm 1/5 W		R930	J	•	ohm 1/8 W ohm 1/8 W		
CP10	- · · · · · · · · · · · · · · · · · · ·		4428506910	1 R167	Carbon Film	47 kohm 1/5 W J	3069473970 1 3029101970 1	R221	Carbon Film	68 kohm 1/5 W 12 kohm 1/5 W		R931 R932	Op			J 309910017	
CP10	•		4428526316		Metal Film	100 ohm 1/5 W J 33 kohm 1/5 W J	3069333970 1	R222	Carbon Film	33 kohm 1/5 W		R933	Not Used!	-			
				R169 R170	Carbon Film Carbon Film	100 kohm 1/5 W J	3069104970 1	R223 R224	Carbon Film Carbon Film	1 Mohm 1/5 W	/ J 3069105970 1	R934	Chip 1		ohm 1/8 W		
2.0	DIODES Zener, UZ 5.1 BSB		2258599103		Carbon Film	68 kohm 1/5 W J	3069683970 1	R226	Carbon Film	15 kohm 1/5 W		R935	On IIP		ohm 1/8 W ohm 1/8 W		
D101	-D111 1N4148, Switching		2058322101			120 kohm 1/5 W J	3069124970 2	R227	Carbon Film	10 kohm 1/5 W		R936	Chip 1		onm 1/8 W		
D102			2258599103		Carbon Film	33 kohm 1/5 W J	3069333970 1 3069223970 1		30 Carbon Film	100 kahm 1/5 V 15 kohm 1/5 V				-	ohm 1/8 W		
	-D119 1N4148, Switching		2058322101	7 R175 R176	Carbon Film Carbon Film	22 kohm 1/5 W J 33 kohm 1/5 W J	3069333970 1	R231 R232	Carbon Film Carbon Film	100 kohm 1/5 V		R957	Chip 3	33 0	ohm 1/8 W	J 309933037	
	INTERRATED CIDCIN	·c		R176 R177	Carbon Film	22 kohm 1/5 W J	3069223970 1		25 Metal Film	330 ohm 1/5 V	/ J 3029331970 3	R958	Chip 1	.0 k	ohm 1/8 W	J 309910337	2 1
(S) IC101	INTEGRATED CIRCUIT CXP82324-330Q	•	2139322703		Carbon Film	20 kohm 1/5 W J	3069203970 1	R236	Metal Film	1 kohm 1/5 W		R959	Not Used!				
C102	·		2139036002	1 R180	Metal Film	100 ohm 1/5 W J	3029101970 1 3069153970 1	R237	Carbon Film	7.5 kohm 1/5 V 15 kohm 1/5 V			INTEGRATED CIRCUITS				
IC103	3 SM5874AM, DA Conve	ter	2139937001		Carbon Film	15 kohm 1/5 W J 33 kohm 1/5 W J	3069333970 1	R238 R239	Carbon Film Carbon Film	15 konm 1/5 v 7.5 kohm 1/5 v		U901	CXP82220-127Q			213832220	
Color No.	4/105 KIA4559S/KIA75559S		2168206103 2168027107		Carbon Film Carbon Film	47 kohm 1/5 W J	3069473970 1	R239 R240	Carbon Film	4.7 kohm 1/5 V		U902	KS9241B, CD-ROM Decoder			213973800	
IC106			2168007204		Carbon Film	750 ohm 1/5 W J	3069751970 1			er er timbakur baya takin takinin da badan bere	of the displacement of the continue of	U903	HU62256ALJ			213943300	
IC107			2168602105		86 Carbon Film	33 kohm 1/5 W J		PCB3	ASSEMBLY PCB CNT		/ J 3679222120 2	U904	STI3400DCV, MPEG V-Ecode HY514260BJC-70, DRAM	er		213853500 213943300	
	o toti pool trogalatoi			R187	Carbon Film	22 kohm 1/5 W J 220 ohm 1/5 W J	3069223970 1 3029221970 1	C301/C3 C303	302 Capacitor, Mylar Capacitor, Electrolytic S			U905 U906	STI4510ACV, MPEG A-Ecode	er .		213803500	
	COILS		0040040000	R188	Metal Film Carbon Film	22 kohm 1/5 W J		C303		ular 0.047 uF 501		U908	CDVS110-ABYA, DATA-CTRL			213853500	
្រី L101	-L104 Inductor, 10 uH		2648610082	4 R189 R190-R19		47 kohm 1/5 W J		CP301	Connector, Wafer, 14P		4428517310 1	U909A	GD74HC04D			213903600	
	TRANSISTORS			R193	Carbon Film	100 kohm 1/5 W J		20(CP30	2) Connector, Wafer, 13P		4428513820 1	U912	STV8438CV, DA-Converter			213853500	.5 1
69 A101	I/Q102 DTC114YS		2208622106	2 R194	Carbon Film	22 kohm 1/5 W J	3069223970 1		302 Diode, 1N4148, Switchin	ng	2058322101 2	U913A/E				213803600	20 1
	3-Q105 KTC3198Y, NPN		2208606105		Metal Film	100 ohm 1/5 W J 15 kohm 1/5 W J	3029101970 1 3069153970 1	Q301	Transistor, DTA114YS 303 Transistor, DTC323TS		2208222105 1 2238422100 2	U913C U913D	GD74HC04D GD74HC04D			213803600	
Q106	5/Q107 KTA1015/BKTA1266Y,	PNP .	2208206105		Carbon Film Carbon Film	22 kohm 1/5 W J		Q302/Q3 Q304	Transistor, DTC32315		2208622106 1	U913D	HY534256AJ-70, DRAM			213943300	01 1
Carteria	3/Q109 KTC3198Y, NPN		2208606105 2208622106		Carbon Film	20 kohm 1/5 W J	3069203970 1		803 Resistor, Metal Film	100 ohm 1/5 V		U914	CXA1645N-T6, RGB Decoder			213972200	ר ר <i>ו</i>
Q110	) DTC114YS 1/Q112 KTA1015/BKTA1266Y,	PNP	2208206105		06 Carbon Film	47 kohm 1/5 W J		P. C. W.	ASSEMBLY PCB FROM	umanata kata ka			MICCEL I ANEOUS				
Q111			2208622106	1 R707	Carbon Film	1 Mohm 1/5 W J		PCB4 CN402	Connector, Lead Ass'y,		436103112632 1	11040	MISCELLANEOUS Crystal, OSC, 5 0 MHz			393821300	J2 1
Q114		P	2228106104		Carbon Film	68 kohm 1/5 W J	300300337U	CP401	Connector, Wafer, 7P	,	4428525570 1	U910 U911	Crystal, OSC, 30 MHz			393821300	01 1
Q115			2208622106 2228106104		MISCELLANEOUS			15	Switch Tact		4658003710 10	XT901	Resonator, 10 MHz			393813175	
Q116	6 KTA966A/KTA1273, PN	IP .	2220100104	X101	Resonator, CST10.00MTW	1	3938131750 1					XT902	Crystal, 24 MHz			390810133	
564 565	RESISTORS			X102	Crystal, 16.9344 MHz		3938101500 1 2328130322 1	74				XT903	Crystal, 3.579545 MHz			393820198	,
R100	0/R101 Carbon Film	2.2 ohm 1/5	W J 3069229970	2 8	FIP, 9CEM6		2020100022										
58]																	

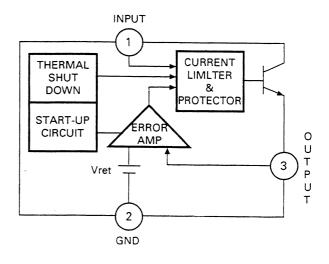
Parts No. Q'ty Version

### IC FUNCTIONAL BLOCK DIAGRAM

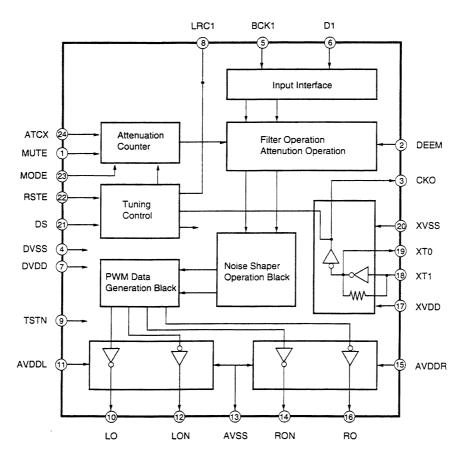
IC102: GD74HC157



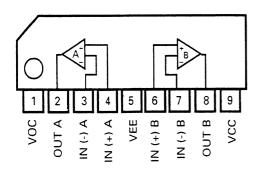
IC108: KA7805



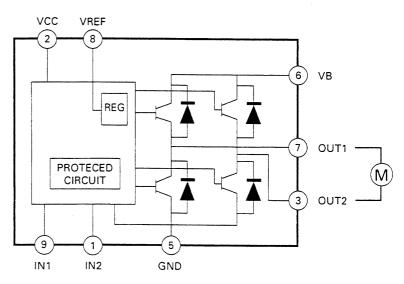
#### IC103: SM5874AM



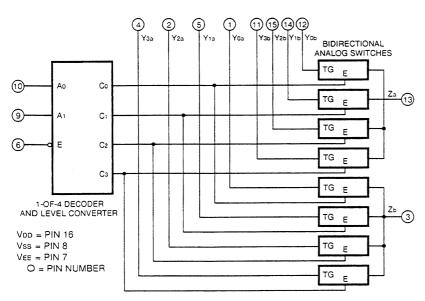
IC104/IC105 : KIA4559S/KIA75559S



IC107: TA7291S



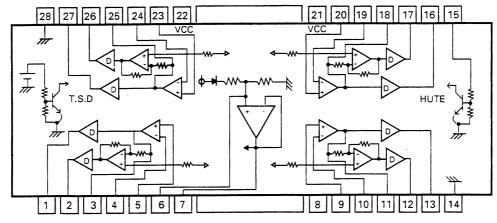
IC106: NJM4052 BCF



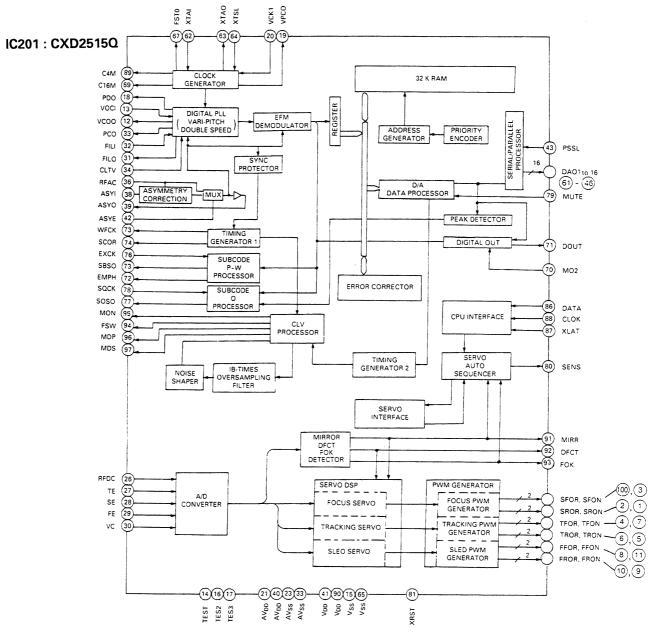
TRUTH TABLE

11	VPUT	•	CHANNELS								
Ε	Αı	Αo	Ao Yo-Z Y1-Z Y2-Z								
L	L	L	ON	OFF	OFF	OFF					
L	L	Н	OFF	ON	OFF	OFF					
L	Η	L	ON	OFF	ON	OFF					
L	Н	Ή	ON	OFF	OFF	ON					
Н	Χ	Х	ON	OFF	OFF	OFF					

IC202: BA6297

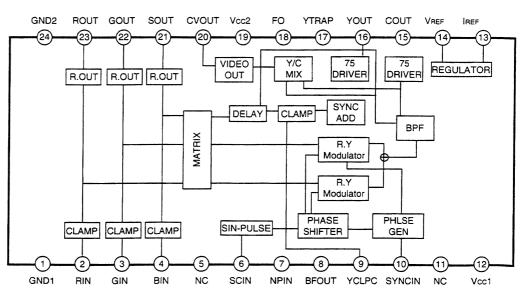


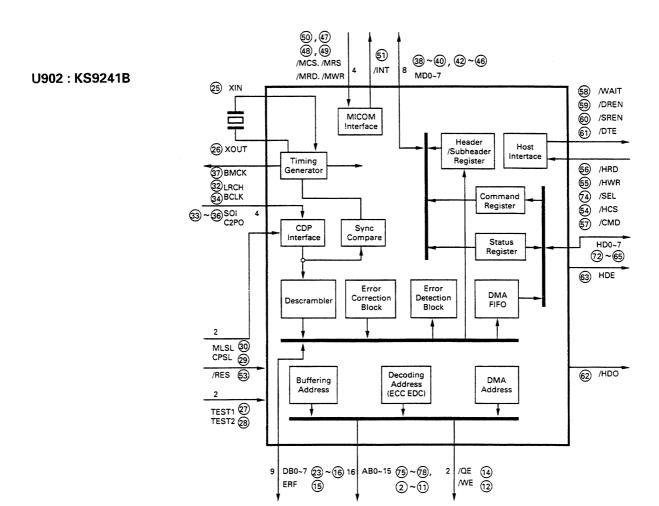
는 이 아이에 아이지를 사용하면 ... 음식 사이 아이 아이 아이들에게 있다면 보는 아이는 이 불 다스를 사용하면 **되었다면 되었다.** 

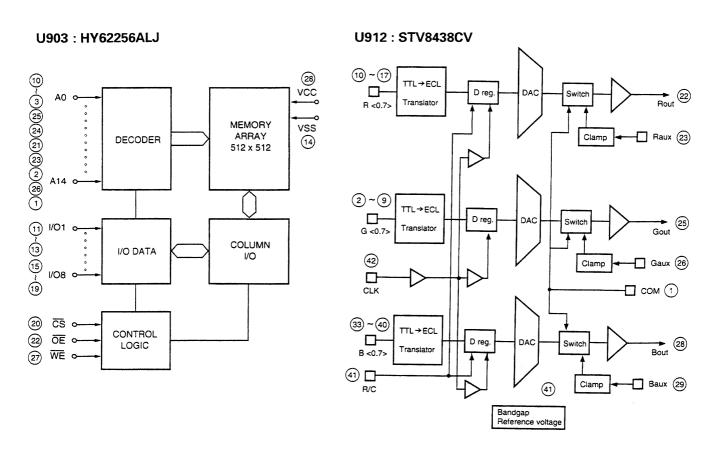


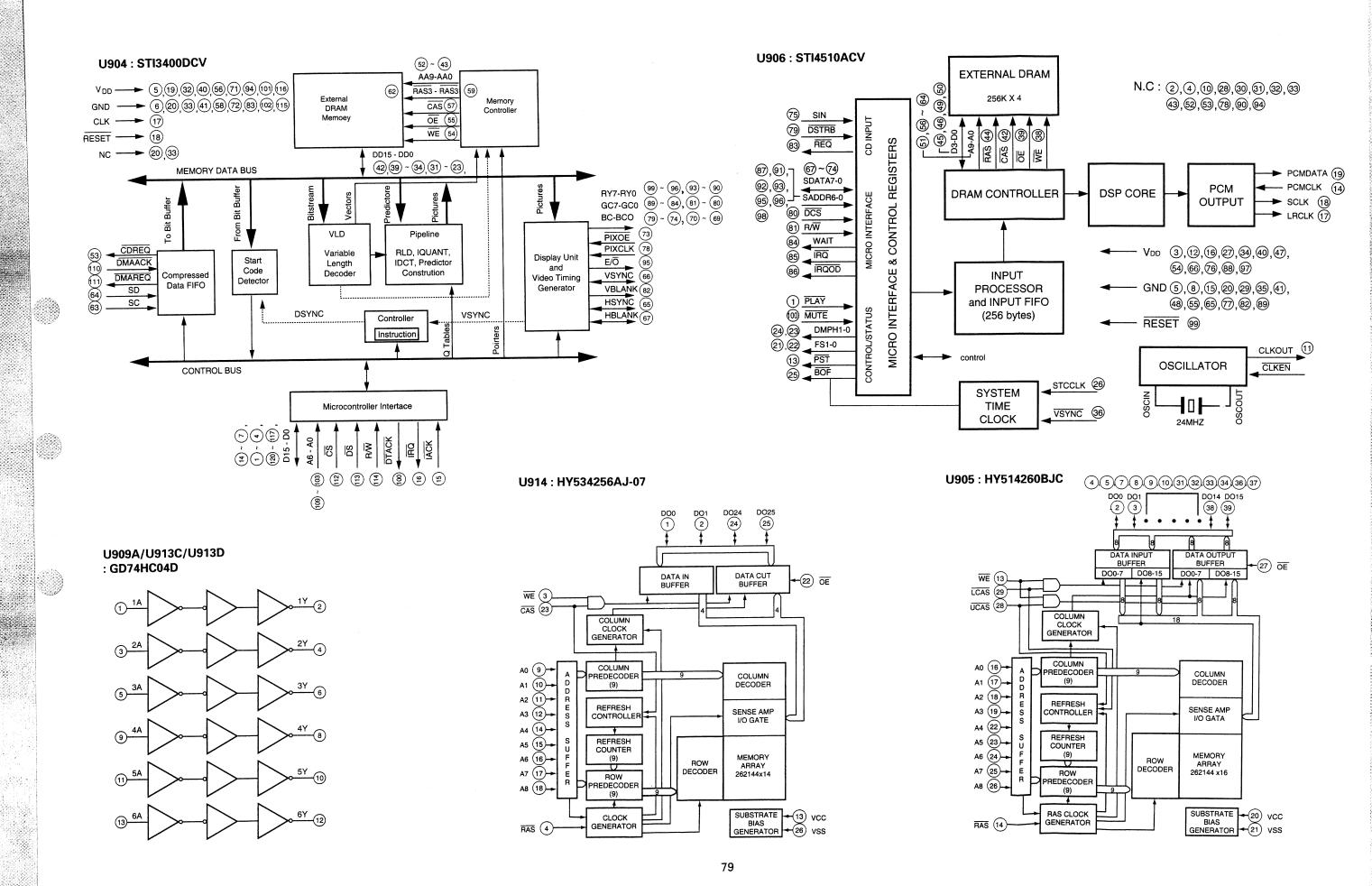
### **MPEG PART**

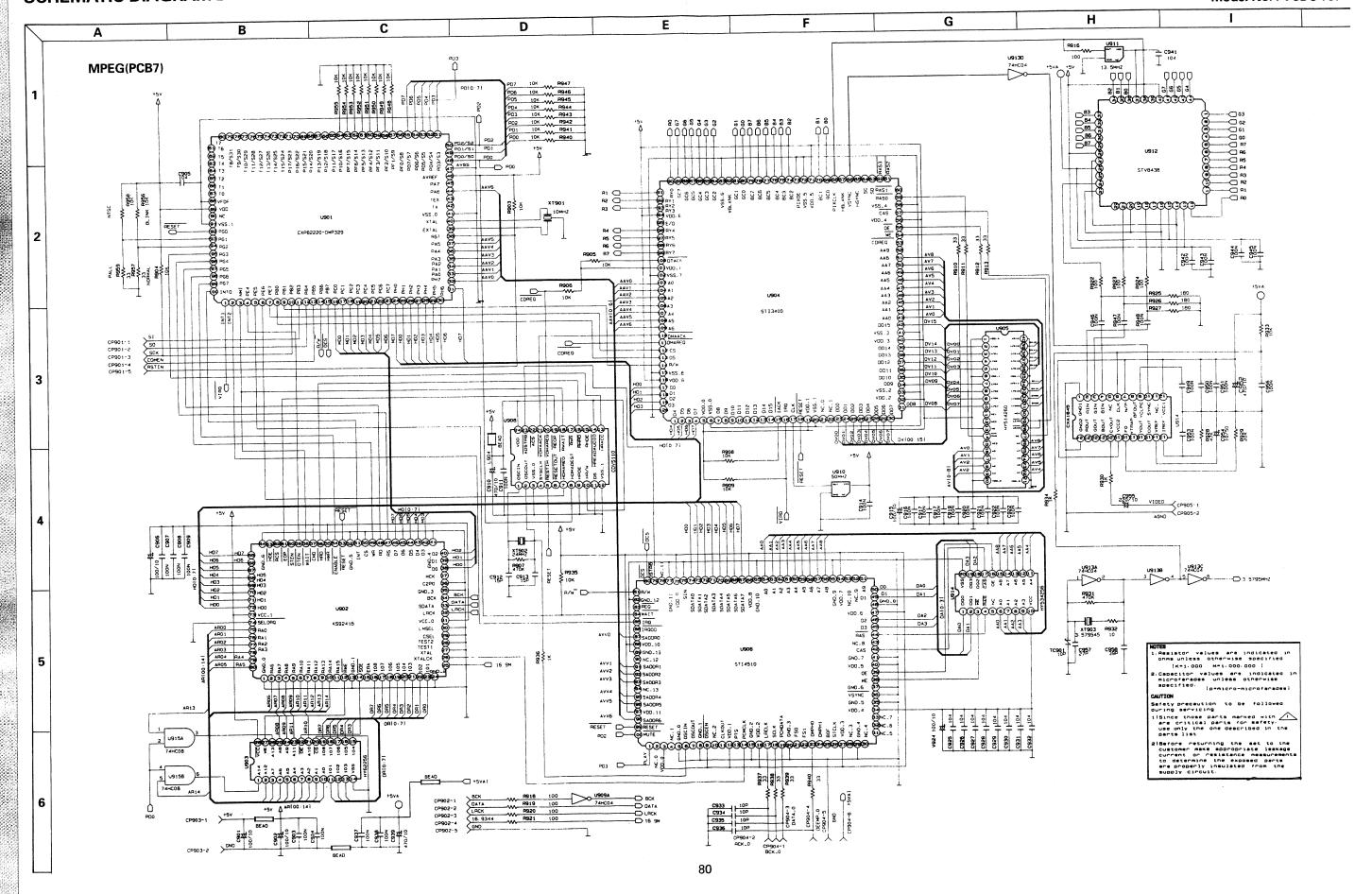
U914 : CXD1645N - T6



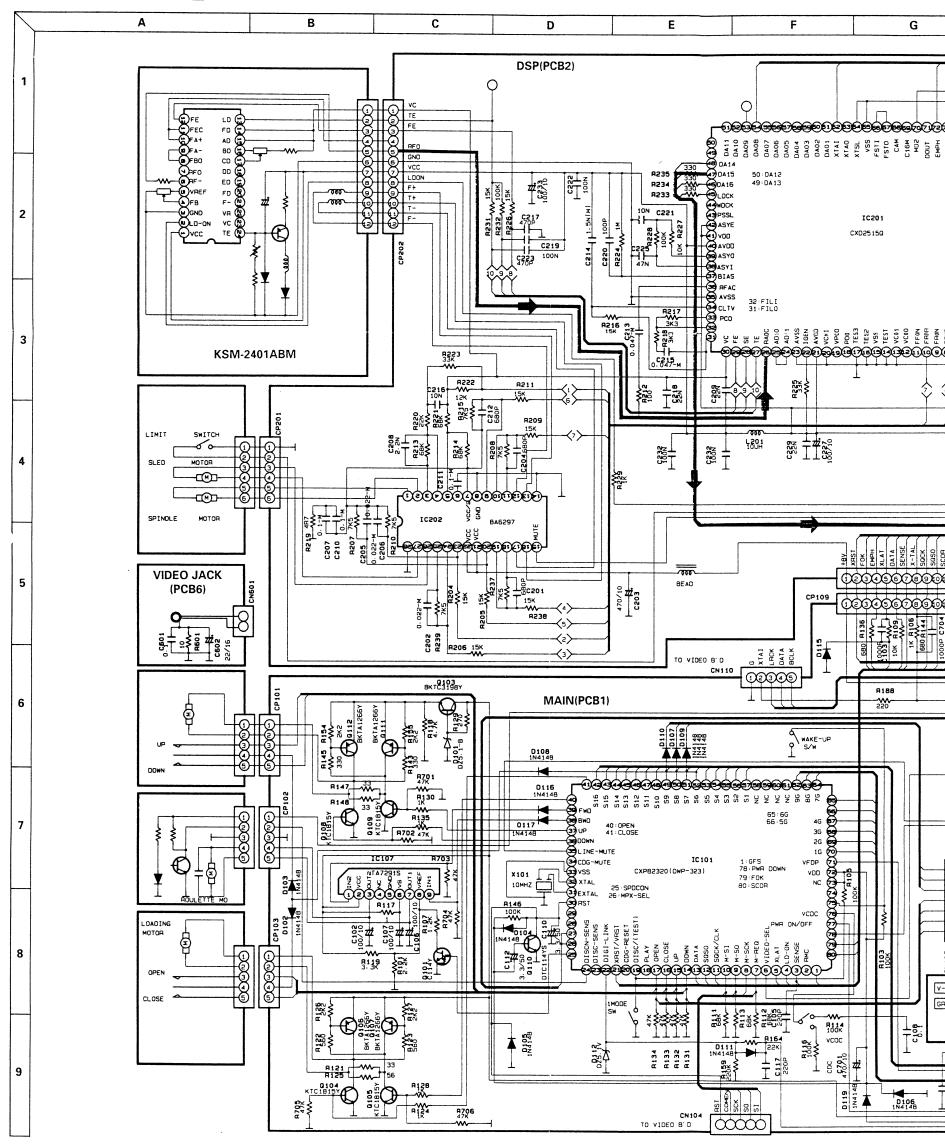




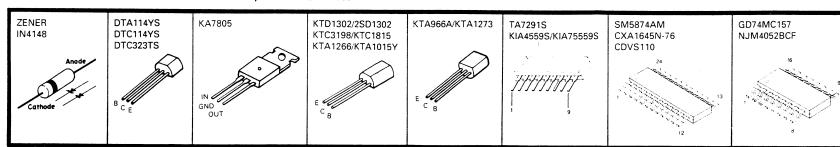


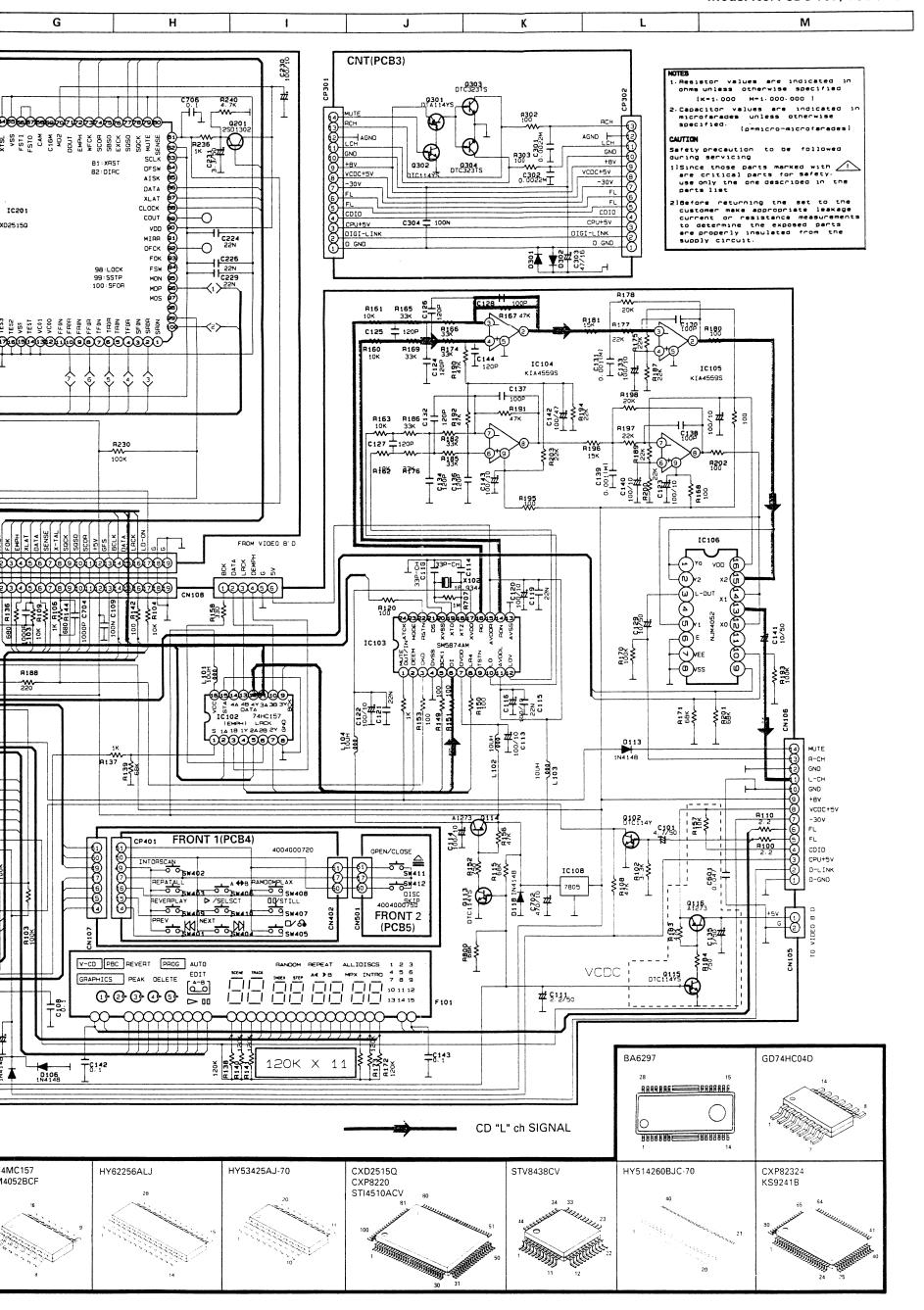


#### **SCHEMATIC DIAGRAM II**

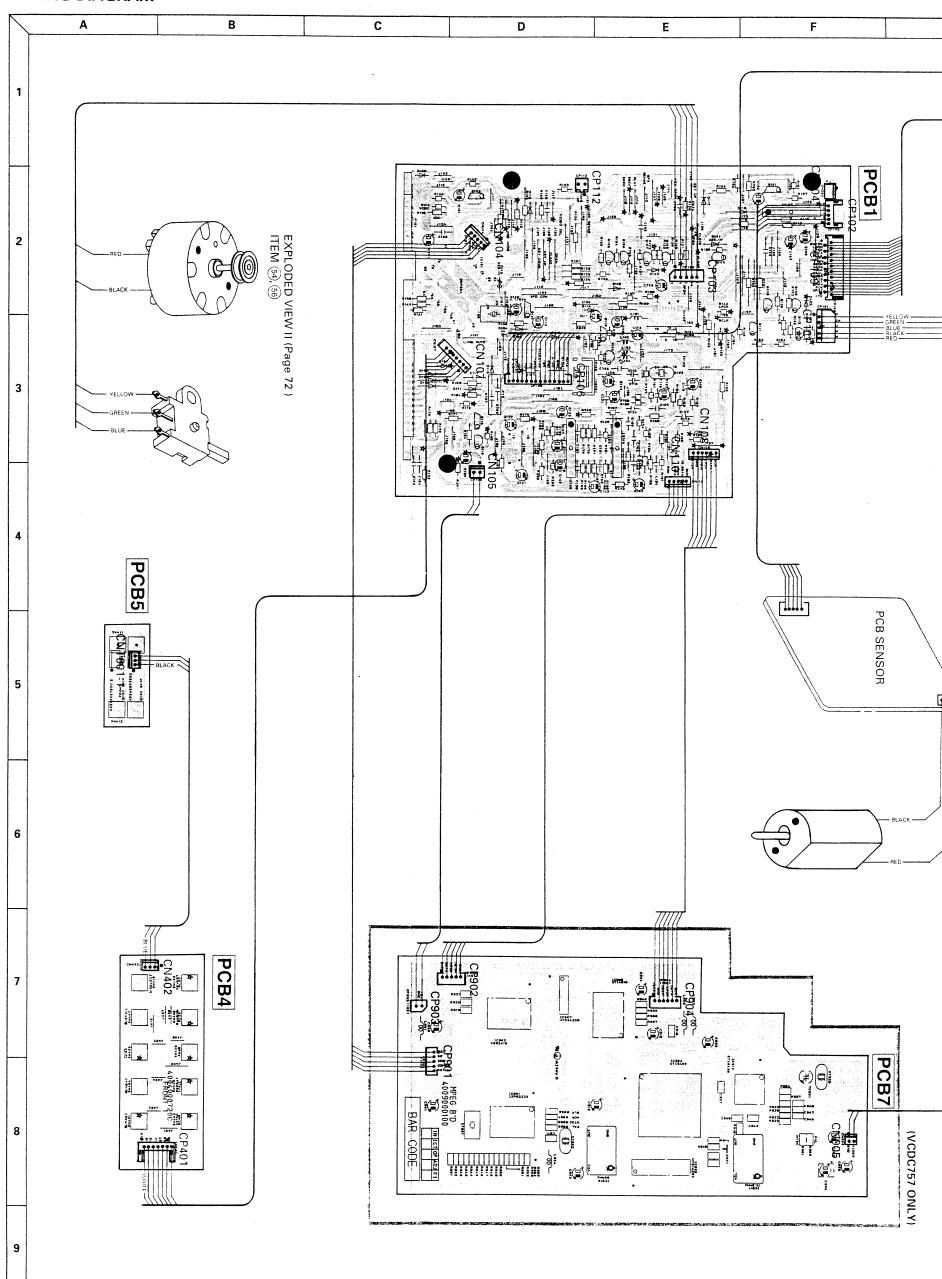


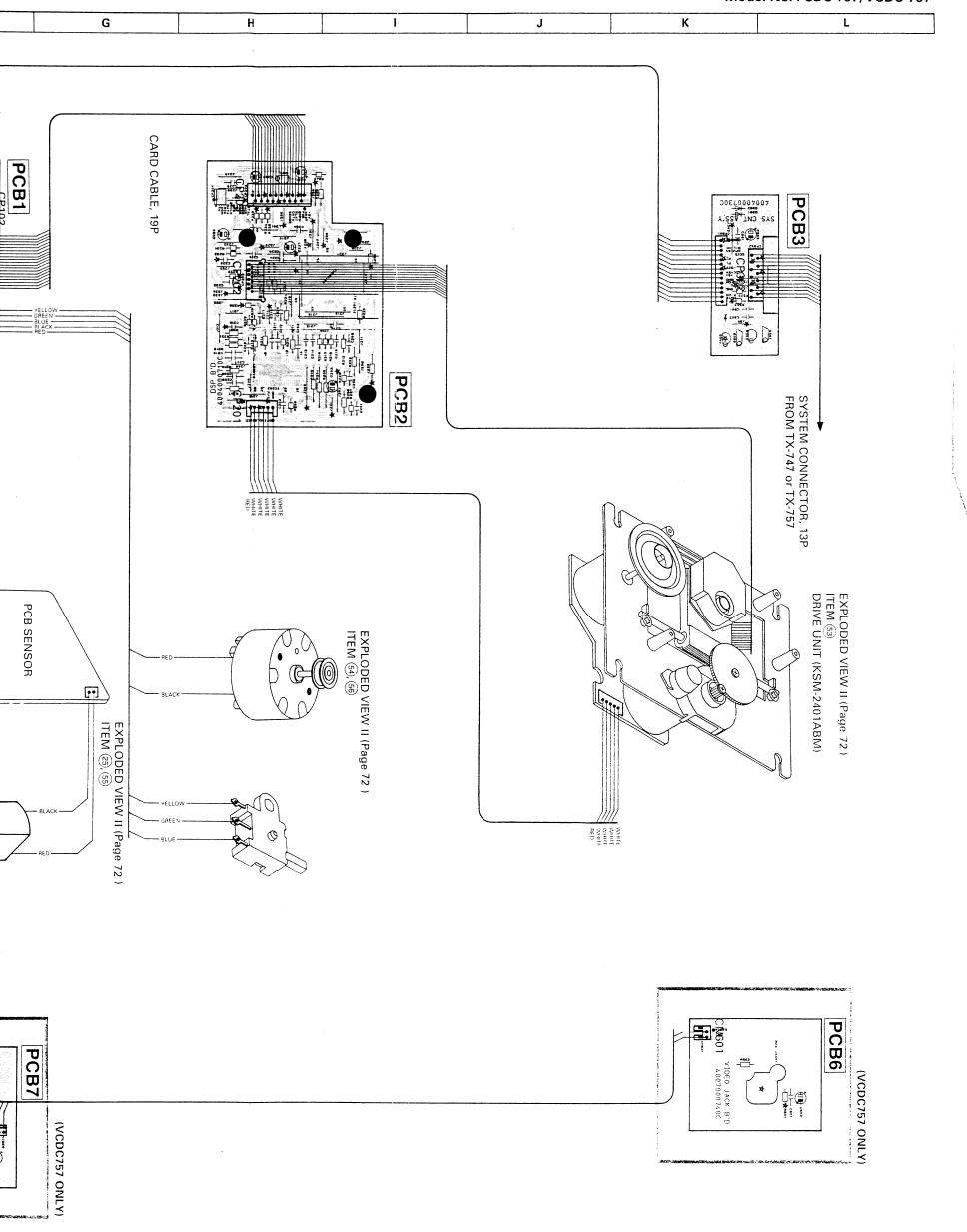
### PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.





### **WIRING DIAGRAM**





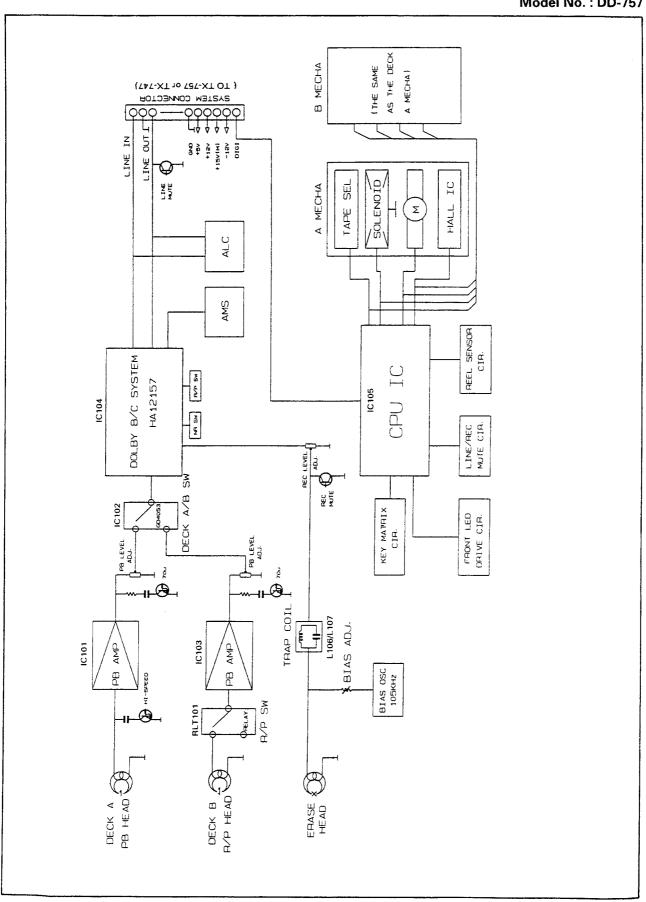
# - DD-757 -

## **SPECIFICATIONS**

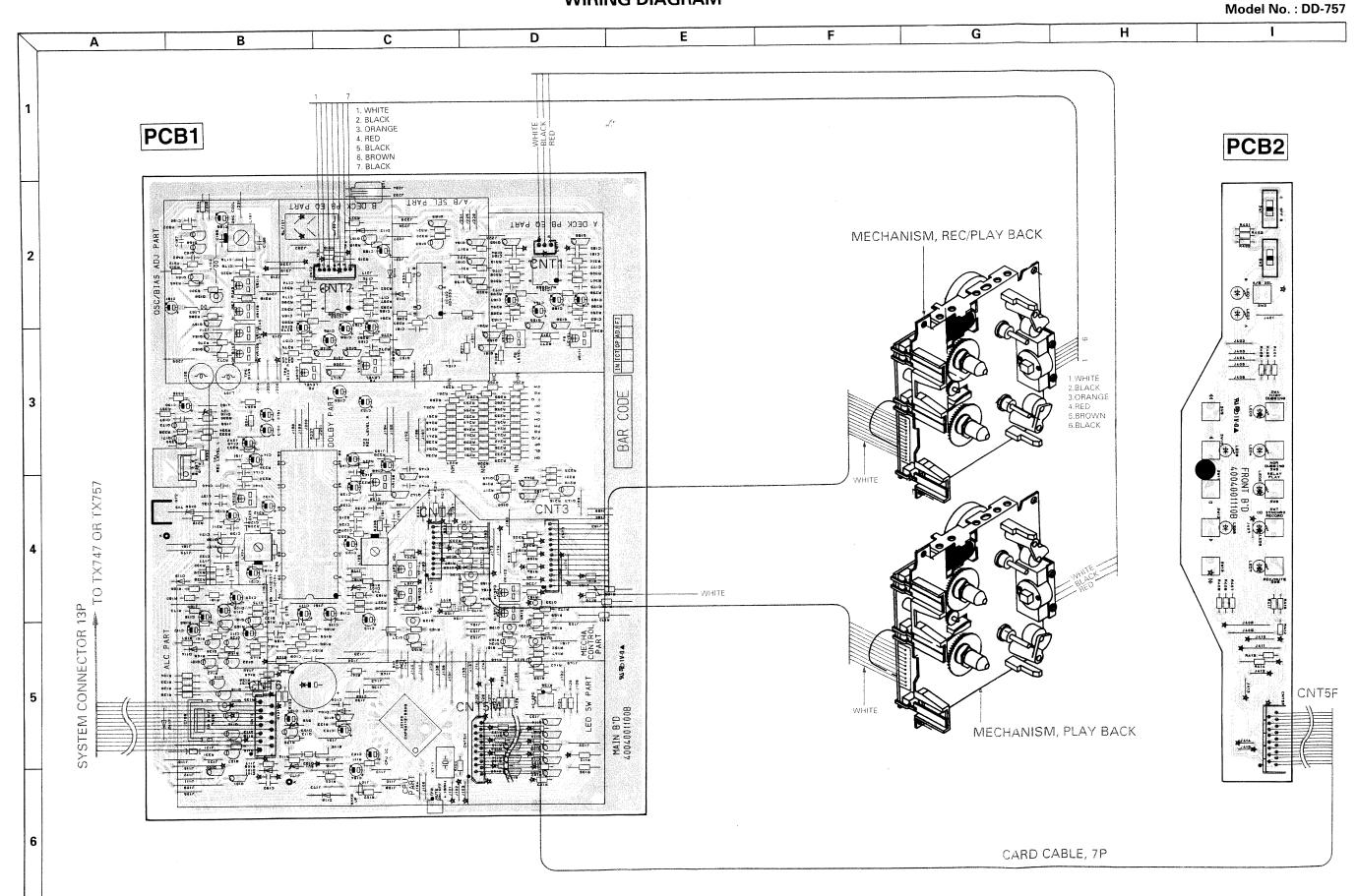
Track Configuration The 4-track, 2-channels and a rotary reverse type head stereo cassette de 1-Electronic governor 1-High torque DC motor (Reel) Mechanism 1-Motor, 1-Solenoid mechanism	eck motors
Heads Rec/Playback head	Hard permalloy
Eraser head	Double gap ferrite
Tape Speed 1-7/8 IPS (4.76 cm/sec) (FWD/REV)	$\pm 1.0/ \pm 1.0\%$
Wow/Flutter (CCIR Unweighted)	No more than 0.35%
Fast Winding Time (C-60)	About 120 sec
Input Sensitivity Impedance	400 mV/51 kQ
REC IN	100 III V
Output Level/Load impedance PLAY OUT	400 mV/1.5 kΩ
Signal to Noise Ratio (W.CCIR/ARM)	
CrO <sub>2</sub> Tape with Dolby B/C NR	More than 66/76 dB
CrO <sub>2</sub> Tape without Dolby B/C NR	More than 56 dB
Frequency Response (-20 dB REC Dolby NR off)	
Normal Tape	20 Hz - 17.5 kHz, $\pm 3 \text{ dB}$
CrO <sub>2</sub> Tape	20 Hz - 17.5 kHz, ±3 dB
Metal Tape	20 Hz - 17.5 kHz, ±3 dB
Total Harmonic Distortion (3rd, 333 Hz, 0 dB, Normal Tape)	No more than 1.0%
Channel Separation	No more than 38 dB

## **BLOCK DIAGRAM**

Model No.: DD-757



## **WIRING DIAGRAM**



## **DISASSEMBLY PROCEDURES**

#### REFER TO PAGES 85 AND 95.

- 1 COVER TOP REMOVAL
  - Remove 6 screws a and then remove the Cover Top
- 2 FRONT PANEL ASSEMBLY REMOVAL
  - 1. Remove the Cover Top  $oldsymbol{\mathfrak{G}}$  , referring to the previous step  $oldsymbol{\mathbb{1}}$  .
  - 2. Remove the card cable from wafer (CNT5M) on the Main P.C.Board (PCB1).
  - 3. Disconnect (CNT1, CNT2, CNT3 and CNT4) from Main P.C.Board (PCB1).
  - 4. Remove 7 screws **b** and then remove the Front Panel Assembly **AA**.
- 3 MECHANISM ASSEMBLY REMOVAL
  - 1. Remove the Cover Top 

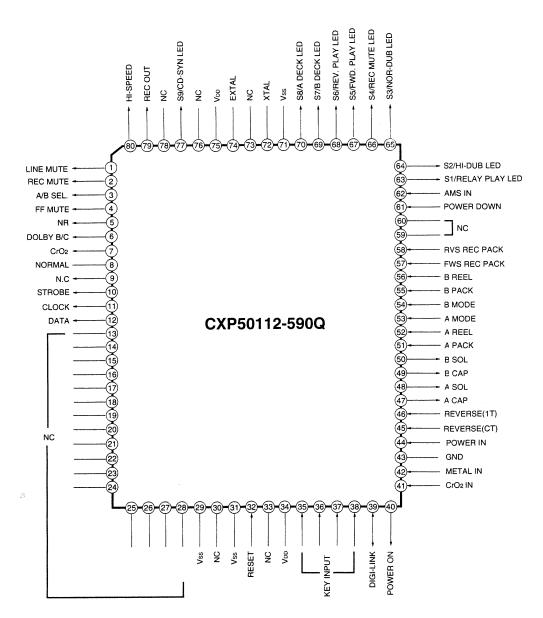
    , refering to the previous step 

    .
  - 2. Remove the Front Panel Assembly (AA), referring to the previous step [2]
  - 3. Remove Base Door 7 and 8 by pressing the hooks of both sides and pulling it toward you gently.
  - 4. Remove 8 screws and then remove the Mechanism and and
  - 5. Remove the Lid Cassette 9 right and left.
  - 6. Remove 4 screws d and then remove the Guide Door 19
- 4 FRONT P.C.BOARD (PCB2) REMOVAL
  - 1. Remove the Cover Top (9), referring to the previous step 1.
  - 2. Do steps 2 and 3
  - 3. Remove 2 screws (a) and then remove the Front P.C.Board (PCB2).
- 5 MAIN P.C.BOARD (PCB1) REMOVAL
  - 1. Remove the Cover Top (9), referring to the previous step 1.
  - 2. Remove the card cable from wafer (CNT5M) on the Main P.C.Board (PCB1).
  - 3. Disconnect (CNT1, CNT2, CNT3, CNT4 and CNT6) from the Main P.C.Board (PCB1).
  - 4. Remove 2 screws 1 and then Main P.C.Board (PCB1).

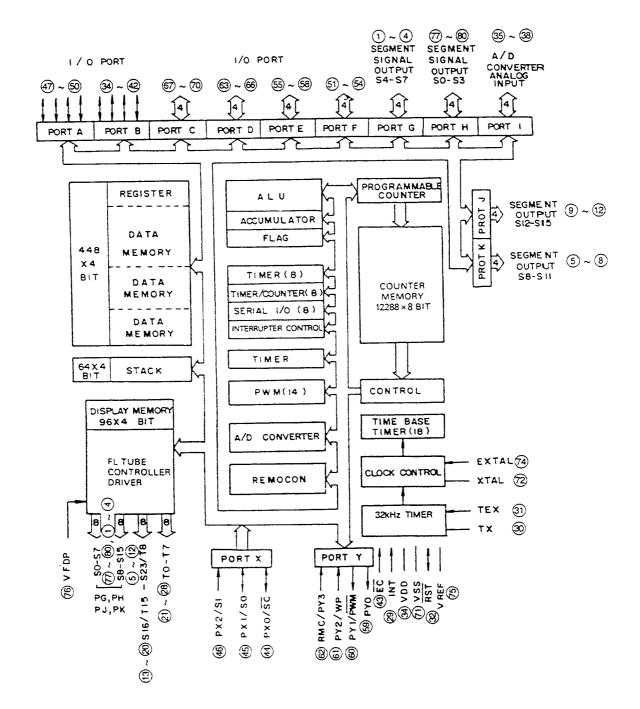
### **CIRCUIT DESCRIPTION**

### CPU(IC105):CXP50112-590Q

#### 1. Pin Description



#### 2. Block Diagram



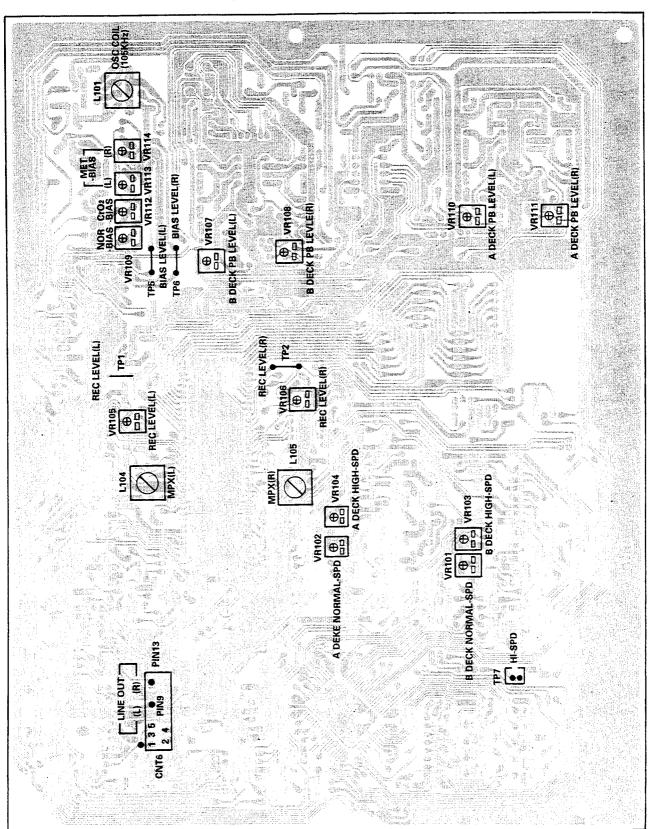
### 3. Input and Output Terminal Function

Pin No.	Symbol	Description
1	LINE MUTE	Output for muting the line output.
		Except play or recording (dubbing), output is "H".
2	REC MUTE	Output for muting recording output. (If recording, then "L")
3	A/B SEL.	Output for controlling to select Deck A or B. (If Deck B, then "H")
4	FF MUTE	Output for muting line output during FF or REW. (If FF or REW, then "H")
5	NR	Output for controlling the noise reduction. (If the NR mode, then "H")
6	B/C	Output for controlling the DOLBY B/C. (If the DOLBY B, then "H")
7	C <sub>r</sub> O <sub>2</sub>	Output for checking a C <sub>r</sub> O <sub>2</sub> mode on Deck B. (If C <sub>r</sub> O <sub>2</sub> tape, then "H".)
8	NORMAL	Output for checking a Nor. mode on Deck B. (If Nor. tape, then "H".)
9	NC	Not Used!
10	STROBE	Strobe output to IC104 (HA12157).
11	CLK	Clock output to IC104 (HA12157).
12	DATA	Data output to IC104 (HA12157).
13~28	NC	Not Used!
29	Vss	This pin provides the ground potential.
30	NC	Not Used!
31	Vss	This pin provides the ground potential.
32	RESET	Input for the resetting system.
33	NC	Not Used!
34	Vdd	+5 V power supply for CPU (IC105).
35~38	KEY INPUT	Data input for key scan.
39	DIGI-LINK	Input/Output for controlling DIGI-LINK.
40	POWER ON	Output for power on. (If power on, then "H")
41	CrO2 IN	Input for checking a C <sub>r</sub> O <sub>2</sub> tape on Deck B. (If C <sub>r</sub> O <sub>2</sub> tape, then "H")
42	METAL IN	Input for checking a metal tape on Deck B. (If metal tape, then "H")
43	GND	Ground
44	POWER IN	Input for power on for itself. (If power on itself, then "L")
45/46	REVERSE CT/1T	According to reverse mode switch setting, input for selecting the desired
		reverse mode.
		Reverse Reverse
		mode CT 1T
		L H
		H L
		Н Н
47	A CAP.	Output for driving the capstan of Deck A.
48	A SOL.	Output for driving the solenoid of Deck A.
49	B CAP.	Output for driving the capstan of Deck B
50	B. SOL.	Output for driving the solenoid of Deck B
51	A PACK	Input for checking a tape on Deck A. (If there's a tape, then "L")
52	A REEL	Input for detecting the reel pulse from Deck A.
53	A MODE	Input for detecting the play state on Deck A.
54	B MODE	Input for detecting the play state on Deck B.
55	B PACK	Input for checking a tape on Deck B. (If there's a tape, then "L")
56	B REEL	Input for detecting the reel pulse from Deck B.
57		Input for checking the forward tap of tape. (If there's the tape, then "L")
58		Input for checking the reverse tap of tape. (If there's the tape, then "L")
59/60	NC	Not Used!

Pin No.	Symbol	Description
61	POWER DOWN	Input for checking the power down. (If power down, then "L")
62	AMS IN	Input for checking the balnk space during AMS (Atomatic Music Searching) (If on the blank space, then "H").
63	S1 RL-PLAY	Output for lighting on the LED at relay play mode. (If relay play, then "H")
64	S2 HI-DUB	Output for lighting on the LED at high dubbing mode. (If high dubbing, then "H").
65	S3 NOR-DUB	Output for lighting on the LED at normal dubbing mode. (If normal dubbing, then "H").
66	S4 REC MUTE	Output for lighting on the LED at recoding mute mode. (If recording must, then "H").
67	S5 FWD PLAY	Output for lighting on the LED at forward play mode. (If forward play, then "H")
68	S6 REV PLAY	Output for lighting on the LED at reverse play mode. (If reverse play, then "H")
69	S7 B DECK	Output for lighting on the LED at deck B mode. (If deck B play, then "H")
70	S8 A DECK	Output for lighting on the LED at deck A mode. (If deck A play, then "H")
71	Vss	This pin provides the ground potential.
72	XTAL	Output for crystal oscillator.
73	NC	Not Used!
74	EXTAL	Input for crystal oscillator.
75	Vdd	+5 V power supply for CPU (IC105).
76	NC	Not Used!
77	S9 CD-SYN LED	Output for lighting on the LED at CD synchro mode. (If CD synchro, then "L")
78	NC	Not Used!
79	REC OUT	Output for controlling the record.
80	HI-SPEED	Output for controlling the tape speed. (If hi-speed, then "H")

## **ALIGNMENT PROCEDURES**

### **Adjustment and Test Points (PCB2)**



#### **Before Measurements and Adjustments**

The following general conditions apply to the electrical measurements and adjustments unless especially stated otherwise.

- Dolby NR switch off.

- Use 400mV(200 nwb/m) for 0 dB as the standard level of the unit.

#### 1. Test tape

• TCC-155

Azimuth (14kHz, -24 dB)

• TCC-114

Tape speed (3.15 kHz, -10 dB) Playback level (Dolby NR ref. tape 400 Hz, 0 dB)

• TCC-130 • TCC-185C

Playback frequency response

#### - Reference Blank Tape.

Normal

**TDK AC-224** 

• CrO2

**TDK AC-513** 

Metal

**TDK AC-712** 

#### 2. Instruments required

- Audio frequency oscillator
- ACVM or dual channel mV-meter
- Wow/Flutter meter
- Oscilloscope

#### **Playback Section**

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Head Azimuth	TCC-155 14 kHz	FWD Play (A & B Deck)		Line output	AC mV-meter Oscilloscope	, ,	Max • Lissajous wave from become
	(A.BEX)	REW Play (A & B Deck)				Adjusting a left screw of head	a straight , line with an angle 45 deegrees
Playback at normal speed	TCC-114 3.15 kHz -10 dB(A. Bex)	Play (A & B Deck)			Wow and Flutter Meter	A Deck VR102 & B Deck VR101	3150 Hz±30 Hz
Playback at hi-speed (TP7 short)	TCC-114 3.15 kHz -10 dB(A.Bex)					A Deck VR104 & B Deck VR103	4725 Hz±45 Hz
Playback Level			A Deck VR110,111	400 mV			
						B Deck VR107,VR108	400 mV
Playback Frequency Response	TCC-185C 12.5 kHz, 1 kHz, 60 Hz (A. Bex)				AC mV-meter		See graph Fig. 2 freq. response

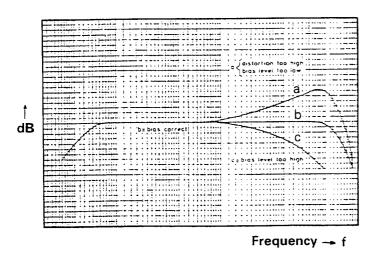
#### **Recording Section**

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Bias OSC Frequency	AC-712(TDK)	Rec/Pause		TP5	Frequency Counter	L101	105 kHz ± 400 Hz

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Target Value	Metal, AC-712			TP5, TP6		VR113, VR114	AC 10.9 V
Bias	CrO2, AC-513		į			VR112	AC 6.8 V
	Normal, AC-224					VR109	AC 6 V
Recording Level	AC-712 (TDK)		400 Hz, 80 mV to Line in	TP1, TP2		VR105, VR106	About 6.7mV
Bias	AC-712 AC-513 AC-224	Rec/Pause	400 Hz to Line	Line out	AC mV-meter	See Target Value Bias	If necessary repeat bias adjustment
	(TDK)		4 kHz - 6.3 10 kHz - 12 14 kHz - 16 to Line in	kHz	Recording nu frequency wit input voltage them back.	See graph fig. 1	
19kHz	Arbitrary Tape	Rec/Pause	19 kHz to Line	Line out	AC mV-meter	LF Generator	100mV
Suppression	Tape			Line out	AC mV-meter Oscilloscope	L104/105	Minimize the reading on ACVM

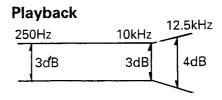
#### Note:

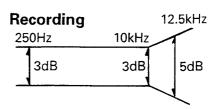
- \*a. Prior to any measurement or adjstment with the tape running, heads and tape guides should be degaussed and cleaned. Reference below the figuer.
- \*b. The maximum permissible speed variation  $\pm 1.0\%$ . Moerover the Wow and Flutter can be read. This value on line out should exceed 0.2%.
- \*c. The voltage on line out should be 400 mV  $\pm$  20 mV. If not, it reduce the LF signal (bias disabled) as many as the reading was too low or too high by VR107/108, VR110/111.
- \*d. When the channel is adjsted, this may slightly affect the adjutment of the other channel. If the adjustment is correct, the frequency response curve will be similar to curve b in figuer 1, distrortion below 3%.



**REC Bias & THD Graph** 

Fig. 1

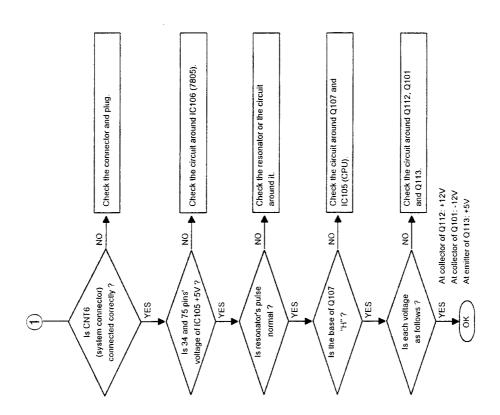


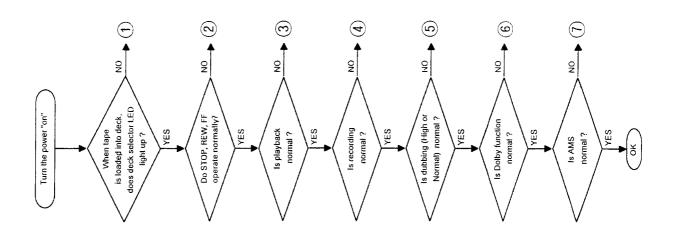


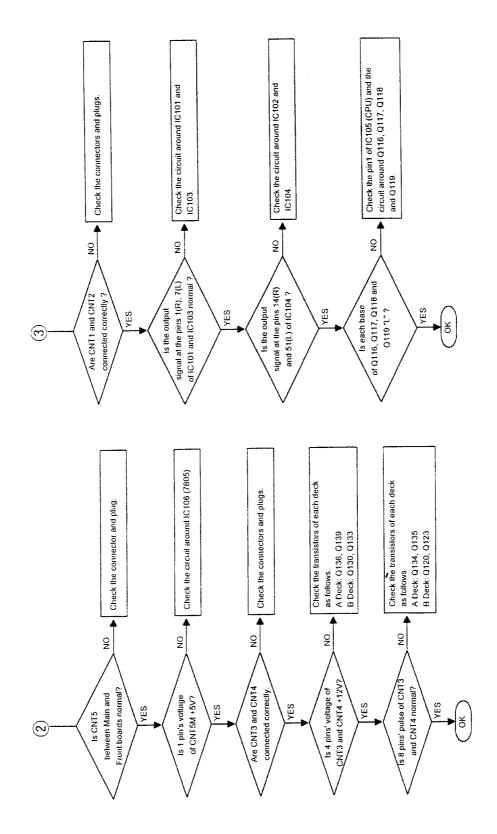
Allowable Playback/Recording Frequency Response Zone

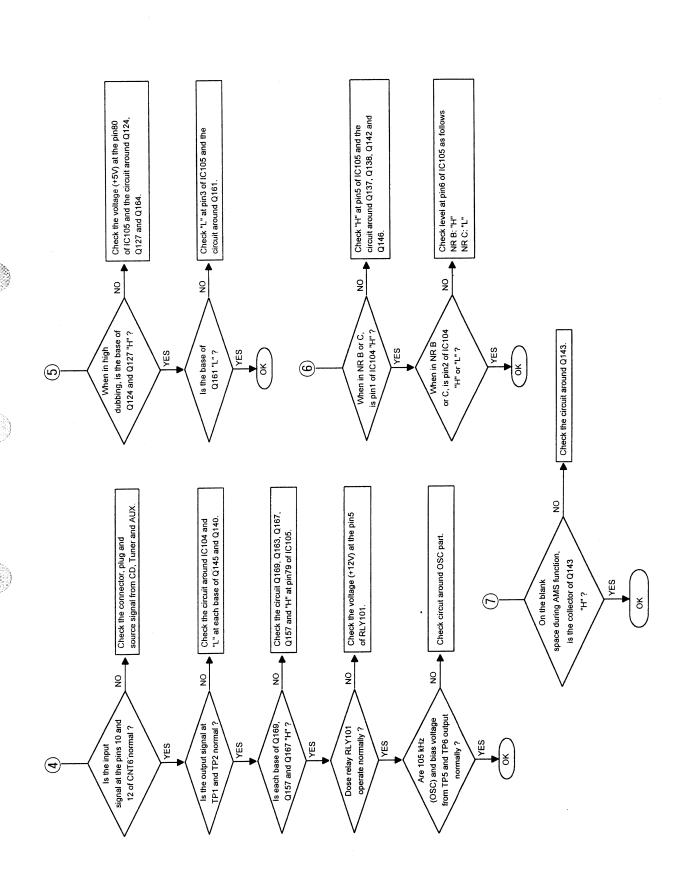
Fig. 2

## **TROUBLESHOOTING**









## **MECHANICAL PARTS LIST**

Ref. No.	Description	Parts No.	Q'ty	Versio
	PACKAGE	0.40005050000	4	140
	Carton Box	049605258203	1	KS A,D,PT INI
	Carton Box	049605258204 9722041210	1	A,D,P1 INI
	Cushion Poly	9715000120	1	
	Film Soft PE	97 13000 120	'	
	CABINET & CHASSIS	0.40505045444	4	140
l	Badge, INKEL	048535045411	1	KS
(1)	Badge, SHERWOOD	048535045421	1	A,D,PT IN
2	Panel Front	048602020011 048663001511	1 1	
3	Door, Right	048663001511	1	
1	Door, Left	8555052610	2	
5 3	Indicator LED Window Door	048555052711	2	
7	Base Door, Right	046512001911	1	
3	Base Door, Left	046512001921	1	
)	Lid Cassette	8562006610	1	
10	Door Spring	6555610210	1	
11	Door Spring	6555610220	1	
12	Knob Slide	048545131611	2	
13	Body Front	048521009611	1	
4	Label Mirror	9057095396	2	
5	Button Selector	048545131211	1	
6	Button Function	048543070212	1	
7	Switch Slide	4618008310	2	
	Switch Tact	4658004410	11	
9	Guide Door	8523013410	1	
0	Damper Oil	6308002310	2	
1	Lever Eject, Right	7143104220	1	
2	Lever Eject, Left	7143104210	1	
3	Spring Lever "A"	6555013510	1	
4	Spring Lever "B"	6555013520	1	
5	Deck Mecha, R/P	5708015110	1	
6	Deck Mecha, CMAL2Z035A	5708014710	1	
7	Bracket Shield	6165151310	1	
8	Bracket Shield	6165151210	1	
9	Foot	6035104310	2 1	
0	Chassis Main	6121614920 6528301710	4	
1	Fastener Cushion Foot	6715021230	1	
2 3	Heatsink	7505202410	1	
3 4	Heatsink	7505202410	1	
5	Chassis Back	046102044611	1	KS
35)	Chassis Back	046102044613	1	PT INDO
35)	Chassis Back	046102044612	1	D
35)	Chassis Back		1	Α
6	Plate Ground	6165143510	1	
7	Stopper Connector	6518002210	1	
8	Connector, System, 13P	4358613501	1	
9	Cover Top	046123017821	1	
	HARDWARE KIT			
i1	Screw, #2BTT 3x8B	8179130083	25	
2	Screw, #2FTC 3x8B	8129230083	2	
3	Screw, #2WPTT 3x6Y	8159230061	2	
4	Screw, #2BTC 3x10B	8109230103	4	1
5	Screw, #2BTC 3x6B	8109230063	2	Eac
	MISCELLANEOUS			Cor
	Connector, Lead Ass'y, 3P, 220mm, Shield	436203227032	1	spe
	Connector, Lead Ass'y, 10P, 200mm	436210200532	1	pari
	Connector, Lead Ass'y, 7P, 200mm, Shield	435207208002	1	are
	Connector, Lead Ass'y, 13P, 200mm	436213200532	1	resi
	Card Cable, YS=1.25-17-180-C	4118617185	1	par
CB1	P.C.Board Main	4004001100	1	retu
2002	D.C. Board Front	4004001110	1	- 1

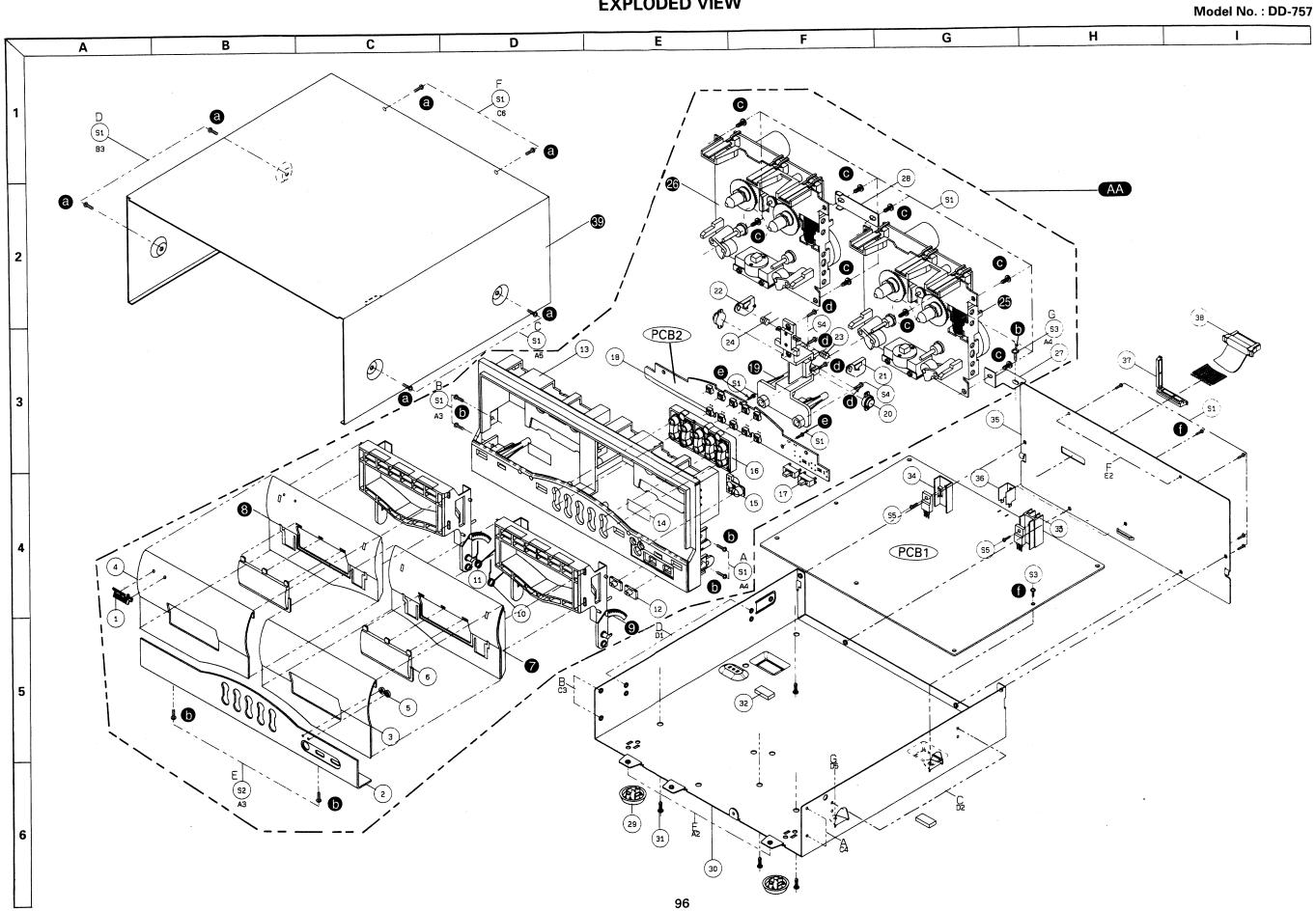
4004001110

#### PRODUCT SAFETY NOTICE

cach precaution in this manual should be followed during servicing. Components identified with the IEC symbol  $\Delta$  in the parts list are of pecial significance to safety. When replacing a component dentified with  $\Delta$ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that the designated in the parts list in this manual. Leakage-current or existance massurements must be made to determine the parest. sistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

PCB2

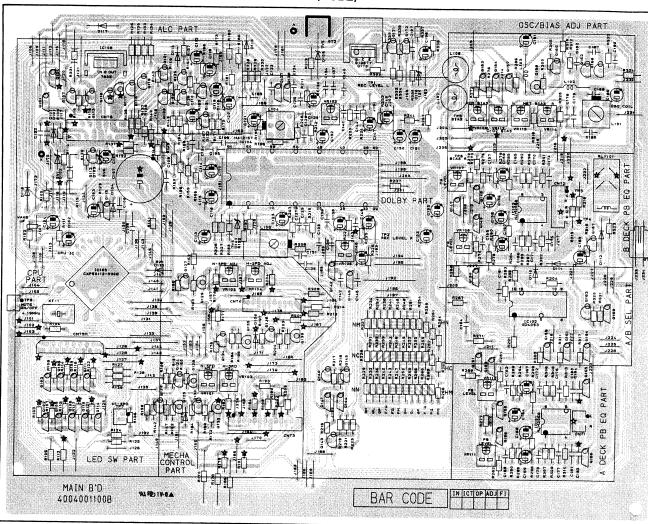
P.C.Board Front



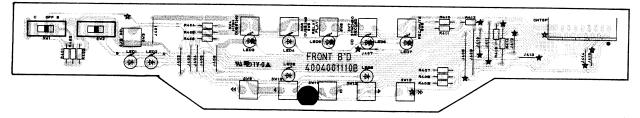
## **PRINTED CIRCUIT BOARDS**

Model No.: DD-757

### MAIN(PCB2)



### FRONT(PCB1)



## **ELECTRICAL PARTS LIST**

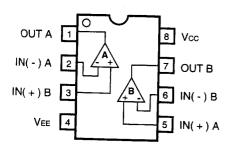
PRODUCT SAFETY NOTICE: Products marked with  $\triangle$  have special characteristics important to safety. If you replace any of these components, read carefully the product safety notice in this manual. Don't degrade the safety of the product through improper servicing. Resistor/Capacitor tolerance – D: (±0.5%), J: (±5%), K: (±10%), M: (±20%), Z: +80, –20%)

Ref. No.	Description					Parts No.	Q'ty	Version	Ref. No.	Description					Parts No.	Q'ty
PCB1	ASSEMBLY P.C.	BOARD MA	UN			and the second second			C195/C19	6 Ceramic Tubular	100	pF	50 \	/ J	3519101935	
C101	CAPACITORS	200							C197	Ceramic Tubular	470	pF	50 \		3519471935	_
C101	Ceramic Tubular	220			) V J	3519221935			C198	Electrolytic SG	10	uF	50 V		3479310071	1
C102	Electrolytic SG Electrolytic SG	1 4.7			V M											
C104/C10		10			V M	3479347971 3479310071	1			CONNECTORS						
C106	Ceramic Tubular	0.1			VZ	3519104935			CNT1	Wafer, 3P					4428516210	1
C107	Electrolytic SG	2200			VM	3409322249			CNT2 CNT3	Wafer, 7P					4428516610	1
C108/C109		0.1			VZ	3519104935			CNT4	Wafer, 13P Wafer, 10P					4428517210	1
C110	Electrolytic SG	1			VM	3479310971	1		CNT5M	Wafer, FFC, 17P					4428516910	1
C111	Ceramic Tubular	0.1			V Z	3519104935			CNT6	Wafer, 13P					4428509015	1
C112	Electrolytic SG	220	u		V M	3479322121	1			174101, 101					4428513800	1
C113	Electrolytic SG	100	u	F 16	V M	3479310131	1			DIODES						
C114/C115		270	р	F 50	VJ	3519271935	2		D101	1N4148, Switching					2058322101	1
C116-C118	8 Electrolytic SG	2.2	u	F 50	V M	3479322971	3		D102	Zener, UZ 5.1 BSB					2258599103	1
C119	Electrolytic SG	0.1	u		V M	3479310871	1		D103	Zener, UZ 5.6 BSB					2258599104	1
C120	Electrolytic SG	10	u		V M	3479310071	1		D104-D106	N4148, Switching					2058322101	3
C121	Electrolytic SG	100	u		V M	3479310131	1		D107	Zener, UZ 7.5 BSC					2258599130	1
C122	Mylar	0.001	u		VJ	3519102120	1		D108	1N4148, Switching					2058322101	1
C123	Electrolytic SG	10	u		V M	3479310071	1		D109	Zener, UZ 7.5 BSC					2258599130	1
C124	Mylar	0.001		F 100		3519102120	1		D110/D111	1N4148, Switching					2058322101	2
C125	Mylar	0.0022		F 100		3679222120	1		D112	1N4003, Rectifier					2258128002	1
C126	Mylar	0.0047		F 100		3679472120	1		D113/D114	,					2058322101	2
C127-C129	•	0.0022		F 100		3679222120	3		D115	Zener, UZ 5.1 BSB					2258599103	1
C130	Electrolytic SG	10	ul		V M	3479310071	1		D116	Zener, UZ 12.0 BSC					2258599116	1
C131	Mylar	0.0047		F 100		3679472120	1		D117/D118	1N4003, Rectifier					2258128002	2
C132 C133/C134	Electrolytic SG	10	uf		V M	3479310071	1									
C135-C138	,	0.0022		F 100	V J V K	3679222120	2			INTEGRATED CIRCUITS	;					
C133-C138	Mylar Electrolytic SG	0.1 10	uf			3679104297	4		IC101	NJM2068D					2168020106	1
C140/C141		0.1	uf uF		V M	3479310071	1		IC102	GD4053					2138001117	1
C142	Mylar	0.001	ur uF		VK	3679104297	2		IC103	NJM2068D					2168020106	1
C143/C144		0.001	ur uF			3519102120	1		IC104	HA12157					2168011135	1
C145	Mylar	0.022	uF			3679223120 3519102120	2		IC105	CXP50112-590Q					2139322702	1
C146	Electrolytic SG	1	uF		V M	3479310971	1		IC106	KIA7805P, Regulator					2168606103	1
C147/C148		10	uF		V M	3479310971	2			COILS						
C149	Electrolytic SG	1	uF		V M	3479310971	1		L101	OSC Bias, CQN-K5174						
C150/C151	Electrolytic SG	10	uF		V M	3479310071	2		L102/L103	Inductor, 10 uH					2638601350	1
C152/C153		1	uF		√ M	3479310971	2		L104/L105	Filter, MPX, FB-10D					2648610082	2
C154	Ceramic Tubular	220	pF			3519221935	1		L106/L107	Trap Bias, 389AC-K5049					2658301120	2
C155	Mylar	0.022	uF			3679223120	1								2658501150	2
C156	Electrolytic SG	47	uF	16 \	/ M	3479347031	1			TRANSISTORS						
C157	Mylar	0.022	uF	100 \	/ J	3679223120	1		Q101	DTC114YS					2208622106	1
C158	Electrolytic SG	47	uF	16 \	/ M	3479347031	1	(	Q102/Q103	DTC114TS						2
C159/C160	Electrolytic SG	4.7	uF	50 \	/ M	3479347971	2	(	Q104	KRA107M/DTA114YS						1
C161	Ceramic Tubular	220	рF	50 \	/ J	3519221935	1	(	Q105/Q106	DTC114TS						2
C162/C163	Mylar	0.022	uF	100 \	/ J	3679223120	2	(	Q107	KTC3198Y, NPN						1
C164	Electrolytic SG	47	uF			3479347031	1	(	Q108-Q111	DTC114TS						3
C165/C166	Mylar	0.022	uF			3679223120	2	(	2112	MPSA56, PNP						1
C167	Electrolytic SG	4.7	uF	50 ∖		3479347971	1	(	2113	MPSA06Y, NPN						1
C168	Electrolytic SG	47	uF	16 V			1		2114	DTC114TS					2208622108	1
C169	Electrolytic SG	4.7	uF	50 V			1		2115	DTC114YS					2208622106	1
C170/C171	Ceramic Tubular	100	pF	50 V			2			KTD1302, NPN				:	2208606112	4
C172/C173 C174	Mylar Ceramic Tubular	0.022	uF	100 V			2			KTC3198Y, NPN				:	2208606105	3
C17 <del>4</del> C175	Ceramic Tubular Ceramic Tubular	560	pF	50 V			1		2123	MPSA56, PNP					2208206113	1
C176/C177	Ceramic Tubular	680	pF	50 V			1			KTC3198Y, NPN				2	2208606105	4
C178-C181	Ceramic Tubular	100	pF	50 V			2			MPSA56, PNP				2	2208206113	2
C182	Mylar	560 0.0056	pF uF	50 V			4			KTC3198Y, NPN				2	2208606105	3
2183	Electrolytic SG	47	uF	100 V 16 V			1		133	MPSA56, PNP				2	2208206113	1
C184/C185	Ceramic Tubular	220	pF	50 V			1		134	KTC3198Y, NPN				2	2208606105	1
2186	Mylar	0.0022		100 V			2 1		1135	MPSA56, PNP					2208206113	1
2187	Mylar	0.033		100 V					136	KTC3198Y, NPN					208606105	1
2188	Mylar	0.0022		100 V			1			DTC114TS					208622108	
189	Electrolytic SG	100	uF	16 V			1 1		139	MPSA56, PNP					208206113 1	
190	Mylar	0.0056		100 V			1		140 141	KTD1302, NPN KRA107M/DTA114YS					208606112 1	
191	Electrolytic SG	100	uF	25 V			1			DTC114TS					238006103 1	
192	Ceramic Tubular	0.1	uF	50 V		3519104935				KTC3198Y, NPN					208622108 1	
193	Ceramic Tubular	100	pF	50 V			1			DTC114YS					208606105 1	
194	Ceramic Tubular	0.1	uF	50 V		3519104935				KTD1302, NPN					208622106 1	
		•		- •	_			CA.	, 10	3 1002, 14714				2.	208606112 1	

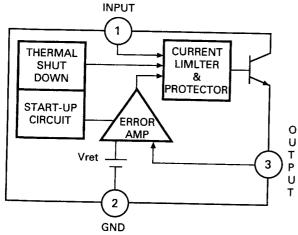
								tomas and travers	Parts No. Q'ty Ve	Version Ref. No. Description	Parts No. Q'ty version
Ä		marke the Office Name	sion Ref. No.	Description	and the second second second second	Parts No. Q'	ty Version Ref. No. De	escription 00 to be 1/5 \	750 1 2 2 2 2	PCB2 ASSEMBLY P.C.BOARD FRON	<b>a</b>
Ref. No.	Description	Parts No. Q'ty Vers		Second Miles	680 ohm 1/5 W J	3029681970 1		arbon Film 22 kohm 1/5 W	Fight Material Add	R401 RES, Carbon Film 15 kg	ohm 1/5 W J 3069153970 1
Q146	DTC114TS	2208622108 1	6 A 74 T	Metal Film Carbon Film	47 kohm 1/5 W J	3069473970 1	R257 C	arbon Film 5.6 kohm 1/5 W	T 1000 34 21 22 2		ohm 1/5 W J 3029122970 1
Q147-Q157		2208622106 11	400 10	Carbon Film	470 kohm 1/5 W J	3069474970 1	* *** TREASON AND TO	,aiboii : IIII			ohm 1/5 W J 3029332970 1
Q158	MPSA56, PNP	2208206113 1		Carbon Film	47 kohm 1/5 W J	3069473970 1	1.6 (45) (5.7)	400 taken 1/5 \A	J 3069104970 2	R404 RES, Carbon Film 8.2 kg	ohm 1/5 W J 3069822970 1
Q159	DTC114YS	2208622106 1		Carbon Film	10 kohm 1/5 W J	3069103970 1	13837077	400 kalam 1/5 M	T MARKA 2/42 LL L	R405 RES. Metal Film 3.3 kg	ohm 1/5 W J 3029332970 1
Q160	KTC2236A/KTC3205, NPN	2228407117 1	R173	Metal Film	560 ohm 1/5 W J	3029561970 1		Carbon Film 120 kohm 1/5 W		R406 RES, Metal Film 1.8 kg	cohm 1/5 W J 3029182970 1
Q161	DTC114YS	2208622106 1	R174	Metal Film	4.7 kohm 1/5 W J	3029472970 1	·	Carbon Film 150 kohm 1/5 V			cohm 1/5 W J 3069822970 1
Q162	KTC2236A/KTC3205, NPN	2228407117 1	R175	Metal Film	3,3 kohm 1/5 W J	3029332970 1	•	Carbon Film 120 kohm 1/5 V	T 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1:	R408 RES, Metal Film 1.8 kg	cohm 1/5 W J 3029182970 1
Q163	KTA1015Y/BKTA1266, PNP	2208206105 1	R176	Metal Film	1.5 kohm 1/5 W J	3029152970 1	, <del>, _ ,</del> , , , _ , ,	Jai Doll 1 11111	A SPRENGERO LL		cohm 1/5 W J 3029332970 2
Q164-Q16	· · · · · · · · · · · · · · · · · · ·	2208622106 3	R177	Carbon Film	47 kohm 1/5 W J	3069473970 1		VICIAI I III I	F 19 10 10 10 10 10 10 10 10 10 10 10 10 10	R411 RES, Metal Film 1.8 k	cohm 1/5 W J 3029182970 1
Q167	KTC3198Y, NPN	2208606105 1	R178	Charles Calle	4.7 kohm 1/5 W J	3029472970		000 1/5 \	그는 전문화를 하는데 그는 그는 그를 다 하는데 그를 다 그를 다 하는데 그를 다 하는		kohm 1/5 W J 3029122970 3
Q168	KTC2236A/KTC3205, NPN	2228407117 1	R179	Metal Film	10 kohm 1/5 W J	3069103970	1 R272 N		The state of the s	LED1-LED5 LED, SLR-34GC N49, Green	2381040301 5
Q169	DTC114YS	2208622106 1	R180	Carbon Film	56 kohm 1/5 W J	3069563970		Metal Film 47 ohm 1/5 V		LED6/LED7 LED, SLR-34URC N49, Red	2381215704 2
Q170	2SB1367Y/KTB1367, PNP	2028106109 1	R181	Carbon Film	560 ohm 1/5 W J	3029561970	1 R274/R275 M	Metal Film 3.3 kohm 1/5 \ Metal Film 1.5 kohm 1/5 \		LED8/LED9 LED, SLR-34GC N49, Green	2381040301 2
0171/017	2 KTC3198Y, NPN	2208606105 2	R182 R183	Metal Film Carbon Film	120 ohm 1/4 W J	3069121270		40 John 1/5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CNT5F Connector, Wafer, FFC, 17P	4428517826 1
			R184	Metal Film	680 ohm 1/5 W J	30296819/0		Calborrania		18(SW3-13) Switch Tact	4658004410 11
	RESISTORS			Carbon Film	47 kohm 1/5 W J	3069473970		Wictair iiiii		,0(0000	
R102	Carbon Film 10 kohm 1/5 W J	3069103970 1	R185	Carbon Film	10 kohm 1/5 W J	3069103970		Wetair min			
R103	Metal Film 220 ohm 1/5 W J	3029221970 1	R186	Carbon Film	47 kohm 1/5 W J	3069473970	•	Wictair iiiii			
R104	Metal Film 4.7 kohm 1/5 W J	3029472970 1	R188	Metal Film	3.9 kohm 1/5 W J	3029392970	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1/5 about 1/5			
R105	Carbon Film 10 kohm 1/5 W J	3069103970 1	R190	Metal Film	4.7 kohm 1/5 W J	3029472970	•	Metal Filli	• •		
R106	Carbon Film 47 kohm 1/5 W J	3069473970 1	R191	Metal Film	2.7 kohm 1/5 W J	3029272970		Metal I IIII	• =		
R107/R10	8 Metal Film 220 ohm 1/5 W J	3029221970 2	R192	Metal Film	4.7 kohm 1/5 W J	3029472970		IVICIALI IIIII			
R107/KK	Carbon Film 22 kohm 1/5 W J	3069223970 1	R193	Carbon Film	47 kohm 1/5 W J	3069473970		1010101 1 11111 1 1 1 1 1 1 1 1 1 1 1 1			
R110	Carbon Film 220 kohm 1/5 W J	3069224970 1	R194	Carbon Film	18 kohm 1/5 W J	3069183970	• • • • • • • • • • • • • • • • • • • •	Carbon 1/F			
R111	Metal Film 4.7 ohm 1/5 W J	3029479970 1	R195	Metal Film	2.7 kohm 1/5 W J	3029272970		Carbotti iiiti			
R112	Carbon Film 47 kohm 1/5 W J	3069473970 1	R196 R197	Metal Film	3.3 kohm 1/5 W J	3029332970		100 John 1/5			
R113/R1	220 chm 1/5 W 1	3029221970 2		Carbon Film	68 kohm 1/5 W J	3069683970		Carbon in A.F.			
R115	Metal Film 47 ohm 1W J	3029470470 1	R198	Metal Film	4.7 kohm 1/5 W J	3029472970	•	100 John 1/5	• •		
R116	Metal Film 3.3 kohm 1/5 W J	3029332970 1	R199	Metal Film	680 ohm 1/5 W J	3029681970		Carbon time 1/5			
R117/R1	200 - Lun 4/E \A/	3029221970 2	R200	Carbon Film	68 kohm 1/5 W J	3069683970		Carbon A/E			
R119	Carbon Film 47 kohm 1/5 W J	3069473970 1	R201	Metal Film	4.7 kohm 1/5 W J	3029472970	•	4.5 July 1/5			
R120	Metal Film 150 ohm 1/5 W J	3029151970 1	R202	Carbon Film	47 kohm 1/5 W J	3069473970	, ,,,,,,	0.0 John 1/5			
R121/R1	1EAN 1	3029221970 2	R203	Metal Film	4.7 kohm 1/5 W J	3029472970	1 1000111001	100 John 1/5			
R123	Carbon Film 47 kohm 1/5 W J	3069473970 1	R204	Carbon Film	10 kohm 1/5 W J	3069103970	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00 John 1/5	•• •		
R124/R1	4 7 1 - b 4/E \A/ 1	3029472970 2	R205	Carbon Film	5.6 kohm 1/5 W J	3069562970	• • • • • • • • • • • • • • • • • • • •	100 John 1/5	•••		
R126	Metal Film 1 kohm 1/5 W J	3029102970 1	R206 R207/R208		22 kohm 1/5 W J	3069223970		Carbon 1/5	•••		
R127-R1	29 Metal Film 4.7 kohm 1/5 W J	3029472970 3	R209/R210		47 kohm 1/5 W J	3069473970	-	VICIAI   1111	** -		
R130	Metal Film 1 kohm 1/5 W J	3029102970 1	R211	Carbon Film	5.6 kohm 1/5 W J	3069562970	* * * * * * * * * * * * * * * * * * * *	Carbon 1/6			
R131	Carbon Film 56 kohm 1/5 W J	3069563970 1 D		Metal Film	560 ohm 1/5 W J	3029561970	1 R318	Carbon in 1			
(R131)	Carbon Film 51 kohm 1/5 W J	3069513970 1 A,KS,	R213	Metal Film	100 ohm 1/5 W J	3029101970		47 Labor 1/5			
R132	Carbon Film 8.2 kohm 1/5 W J	3069822970 1 D		Metal Film	4.7 kohm 1/5 W J	3029472970		Carbon 1/6			
(R132)	Metal Film 3.3 kohm 1/5 W J	3029332970 1 A,KS,	R215	Metal Film	560 ohm 1/5 W J	3029561970		Wictair iiiii			
R133/R1	34 Metal Film 1 kohm 1/5 W J	3029102970 2	R216	Carbon Film	47 kohm 1/5 W J	3069473970	1 R322	0ai boil 1 iii.			
R135	Carbon Film 56 kohm 1/5 W J	3069563970 1 D 3069513970 1 A.KS.			3.3 kohm 1/5 W J	3029332970		Micros 1 1111			
(R135)	Carbon Film 51 kohm 1/5 W J		R219-R223		100 kohm 1/5 W J	3069104970		Metal Film 4.7 onm 1/5 Carbon Film 22 kohm 1/5			
R136	Carbon Film 10 kohm 1/5 W J	3069103970 1 3069822970 1 D	R224/R225		51 . kohm 1/5 W J	3069513970		Carbon Film 10 kohm 1/5			
R137	Carbon Film 8.2 kohm 1/5 W J	3029332970 1 A,KS,		Metal Film	2.2 kohm 1/5 W J	3029222970		Metal Film 1 kohm 1/5	W J 3029102970 3		
(R137)	Metal Film 3.3 kohm 1/5 W J	3029352970 1 2,83,	R227	Carbon Film	39 kohm 1/5 W J	3069393970		Metal Film 68 ohm	2W J 3029680570 1		
R138	Metal Film 1.5 kohm 1/5 W J	3029132970 1	R228	Carbon Film	33 kohm 1/5 W J			Carbon Film 47 kohm 1/5	W J 3069473970 1		
🤃 R139	Metal Film 3.3 kohm 1/5 W J	3069123970 1	R229	Carbon Film	12 kohm 1/5 W J			Metal Film 470 ohm 1/5			
R140	Carbon Film 12 kohm 1/5 W J	3069104970 1	R230	Carbon Film	43 kohm 1/5 W J			Carbon Film 22 kohm 1/5	W J 3069223970 1		
R141	Carbon Film 100 kohm 1/5 W J	3029152970 2	R231	Carbon Film	33 kohm 1/5 W J			Metal Film 680 ohm 1/2			
R142/R		3069123970 1	R232	Carbon Film	22 kohm 1/5 W J			Metal Film 4.7 kohm 1/	W J 3029472970 1		
R144	Carbon Film 12 kohm 1/5 W J	3069822970 1	R233	Metal Film	2.2 kohm 1/5 W J			Metal Film 220 ohm 1/	W J 3029221970 1		
R145	Carbon Film 8.2 kohm 1/5 W J	3069323970 1	R234	Carbon Film	43 kohm 1/5 W J			Metal Film 470 ohm 1/	W J 3029471970 1		
R146	Carbon Film 33 kohm 1/5 W J	3029681970 1	R235	Carbon Film	47 kohm 1/5 W J			Metal Film 47 ohm 1/			
R147	Metal Film 680 ohm 1/5 W J	3069562970 1	R236	Carbon Film	43 kohm 1/5 W J			WINGER FIRM			
R148	Carbon Film 5.6 kohm 1/5 W J		R237	Carbon Film	22 kohm 1/5 W J			SEMI FIXED RESISTORS			
R149	Carbon Film 12 kohm 1/5 W J		R238	Carbon Film	27 kohm 1/5 W J	3069273970			3248022143 2		
⊝ R150	Quibon 1 4/5 \A/ 1		R239	Carbon Film	47 kohm 1/5 W J				3248050143 2		
🧐 R151	Metal Film 4.7 kohm 1/5 W J Carbon Film 47 kohm 1/5 W J	3069473970 1	R240	Carbon Film	68 kohm 1/5 W J				3248010343 4		
ু R152	50 L-b- 4/E M L		R241	Carbon Film	120 kohm 1/5 W J			2 k(B)	3248020243 1		
ිරි R153	Carbon Film 5.6 kohm 1/5 W J		R242	Carbon Film	100 kohm 1/5 W				3248010343 2		
R154	(VICTOR 1 107)	3029472970 1	R243	Carbon Film	91 kohm 1/5 W		معمد أسمان	2 k(B)	3248020243 1		
R155	Metal Film         4.7 kohm 1/5 W J           Metal Film         1.2 kohm 1/5 W J		R244	Carbon Film	5.6 kohm 1/5 W	3069562970	و و و و و د کور د		3248050343 2		
R156	1970taj 1 mm		R245	Carbon Film	120 kohm 1/5 W			== ://=/			
≅ R157	17 haban 4/E M		R246	Carbon Film	150 kohm 1/5 W			MISCELLANEOUS			
R158	001 DOILT		R247	Carbon Film	100 kohm 1/5 W			CST4.19MHz	3938124006 1		
R159	4 = 1 - 1 - 1 - 1 A / E \A/ 1		R248	Carbon Film	10 kohm 1/5 W			Relay, G5V-2-H1	5528040001 1		
R160	4/5/4/ 1		R249	Carbon Film	22 kohm 1/5 W	-		Plate, Ground	6165143510 1		
R161	(VICTOR 1 IIII)		R250	Carbon Film	33 kohm 1/5 W	·		Wire, HI-WP #24, Black, 140mm	152624101444 1		•
R162	001 DOTT 1 1111		R251	Carbon Film	22 kohm 1/5 W	<u></u>		Heatsink	7505202410 1		
R163	and to be a 4/E \A/		R252	Carbon Film	33 kohm 1/5 W	-		Heatsink	7505202410 1		
R164	1/6 (d) 1 (d) 1/6 \A/		R253	Carbon Film	39 kohm 1/5 W	-		Plate Ground	6165143510 1		
R165	Carbon in min	_	R254	Carbon Film	22 kohm 1/5 W	-					ŧ
R166/F	1.2 kohm 1/5 W J		R255	Carbon Film	27 kohm 1/5 W	J J003213310	•				

# IC FUNCTIONAL BLOCK DIAGRAM

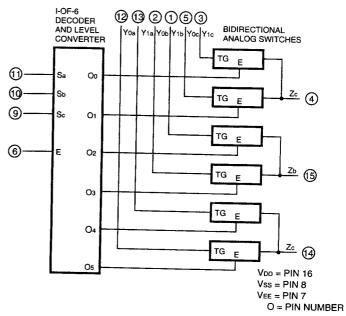
IC101, IC103: NJM2068D



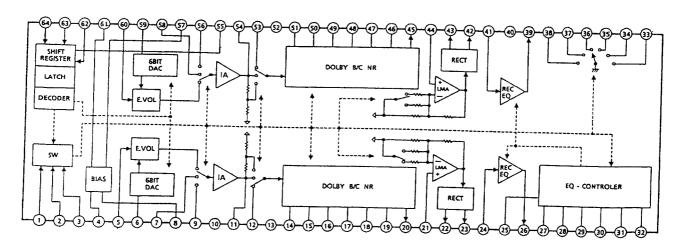
IC106: KIA7806P



IC102: GD4053B



IC104: HA12157NT



### **SCHEMATIC DIAGRAM**

